ACCEPTABILITY OF PUNISHMENT FOR CHILDREN:

A PUBLIC SURVEY

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CONTENTS

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ABSTRACT

The Acceptability of Alternative Punishments for Disruptive Children's Behaviour (as evaluated by the general public)

This study compared the acceptability of five alternative treatments (Social reprimands, overcorrection, timeout, response cost and physical punishment).

A total of 201 members of the general public from the Christchurch area rated the five treatment methods according to their application to one of four written descriptions each representing either a male or female child at home or at school. The major findings were :(1) Respondents distinguished the acceptability of the treatments. Social reprimands and response cost were the two most acceptable procedures, followed by time out, overcorrection and physical punishment. (2) There was a significant treatment and setting interaction, showing that physical punishment and overcorrection were less acceptable at school. (3) Principal components factor analysis showed the acceptability of the procedures was influenced by three factors. Factor one relating to the effectiveness of the procedure was the strongest factor. Factor two related to the humanity of the procedures and the amount of physical discomfort experienced by the child. Factor 3 (the weakest) factor was concerned with who is administering the procedure and the situation in which it is administered.

1.0 SOCIAL VALIDATION.

Definition.

Social validation was defined by Wolf (1978) as comprising the evaluation of three aspects of behavioural procedures or treatments. The first is "how acceptable to society are the goals of the treatment"? The second is the social acceptability of the treatment procedure to the immediate consumer. The third is the degree of consumer satisfaction with the outcome of the treatment. This study will focus on only one aspect of social validation, that of the social acceptability of treatment procedures: do the ends justify the means? That is do participants, caregivers and other consumers of behavioural procedures and therapies consider the treatment procedures acceptable? This study will involve an investigation of the acceptability of five different treatment techniques used in correction of children's disruptive behaviours.

1.1 History of Social Validation.

The need to evaluate the social acceptability of treatment procedures used by behavioural therapists stems from two major issues. The first is the public's general mistrust of behaviour therapy. This has evolved partially from a misunderstanding of the terminology and definitions used in behaviour therapy and partially from the misrepresentation of behaviour therapy by the media. The second issue concerns ethical and legal problems. These centre around protecting the rights of those undergoing the therapy. They include

the right to a treatment that is both effective and acceptable, and the right to enjoy basic privileges. The major obstacle to the protection of individual rights is to simultaneously provide adequate treatment. The third issue is that the therapist has a responsibilty to provide the public and consumer with a therapy that is cost efficient and practical. Finally research on public attitudes and opinions on behavioural procedures or treatments needs to be motivated by the need for scientific and empirical data, rather than being motivated solely by legal, ethical and cost issues.

1.2 ETHICAL AND LEGAL PROBLEMS.

(i) Definitional Confusions.

Experimental psychologists have defined punishment as a " reduction of the future probability of a specific response as a result of the immediate delivery of a stimulus for the response " Johnson (1972 p 1034). The essential concept of this statement is that any stimulus can be called a punishing stimulus if a decrease in the behaviour that produces it is observed. This means that the stimulus does not have to be painful or even unpleasant (Maurer 1974 p 615). The scientific study of punishment leaves no room for the idea of retribution or an eye-for-an eye philosophy.

Punishment is defined by the Oxford dictionary as the penalty inflicted on an offender or severe treatment by an opponent. This definition portrays the essence of what punishment means to the layperson, that is, a negative, painful and possibly cruel procedure.

(ii) The Public Image of Behaviour Therapy

These two vastly different conceptions of punishment contain a great potential for controversy between the public and behaviour therapists. Behaviour therapists have in some respects failed to convey their meaning of punishment to the general public. Terminology like, shaping, aversive conditioning, extinction of maladaptive behaviour and behavioural control has played a major part in the development of a distorted, negative image of behaviour therapy. This attitude to behaviour therapy is perpetuated by the media. In a New York Times article, Thomas Wicker(1974) wrote " Behaviour Modification is a catch all term that can mean anything from brain surgery to a kind of clockwork orange mental conditioning ... it usually includes drug experimentation".

(iii) The Right to Treatment and It's Implications.

The ethical questions faced by behaviour therapy did not come about solely as a result of the general public's misunderstanding. Amongst psychologists a debate has (and is) raging regarding whether behaviour modification techniques intrinsically infringe clients' rights, such as the right to treatment, the right to basic privileges and the right to protection from aversive treatment. During the 1960's the legal concept of "the right to treatment" was articulated by Dr Morton Birnbaum. He proposed that under the courts' traditional powers to protect the rights of citizens, the courts should consider whether or not a person who has been institutionalised through mental illness receives adequate treatment with the objective of regaining health and therefore liberty as soon

as possible. The judicial proceedings, in the United States, that have resulted from implementing the "right to treatment concept" have had potentially conflicting implications for behaviour modification. " On the one hand, the right to treatment can be used as a legal tool for articulating standards that limit the use of certain behaviour modification techniques. On the other hand acceptance of constitutional right to effective treatment could call for the application of behaviour modification programs as an efficient means of treatment" (Budd and Baer 1976 p 176).

An important case impurging the right to treatment is Wyatt v Stickney (1972). In this case the conditions in an Alabama institution for the mentally ill and retarded were challenged. The court found that the institution provided inadequate treatment for the residents. This case was the first in which both the right to treatment had been applied to the mentally retarded and the courts had promulated objectively measurable and judicially enforceable standards for implementing the abstract right to treatment. As a result some of the standards set up by Wyatt prohibit the use of contingent privileges for resident labour that involves the maintenance of the institution. In addition some contingent privileges were reversed. Incorporated in the examination of the the right to treatment is the issue of basic privileges and effective treatment. The right to effective treatment will be discussed in a latter section on the least restrictive alternative. The examples of court cases that are cited are from the United States, never-the less they are applicable as guidelines to New Zealand psychologists.

(iv) The Right To Basic Privileges.

The majority of cases in which the courts have investigated treatment violating the rights of individuals has occurred in corrective institutions for boys. In the Morales v Turman case (1972) the courts ruled that the following privileges are to be unconditionally available to residents: daily showers, access to reading and writing materials, recreational activities for at least one hour per day and privacy of incoming and out going mail. If these court rulings were extended to some behaviour modification programmes, then many of these programmes would be seen as violating individual rights. This is because basic privileges are used as reinforces in some behaviour modification programmes. Wexler noted that privileges used in token systems were, meals, sleeping facilities, toilet articles, reading and writing materials, outdoor exercise, therapy sessions, personal possessions, phone calls, personal cabinets, access to T.V. and room dividers for bedrooms. These have also been used with emotionally disturbed children, delinquents and adult felons (Budd and Baer 1976). It is obvious that if the court rulings were applied in these situations many different types of reinforces would have to be utilized. Wexler suggested the use of atypical privileges such as mail ordering catalogue items, feeding kittens or social activities with a favourite attendant. However effective alternative reinforcers may be difficult to find. Wexler states (1973) that severely debilitated patients had almost no strong reinforcers other than sleeping and eating. This raises the paradox that effective reinforces are often those whose withholding is considered by the courts to be a violation individual rights. The problem that psychologist are now faced with is aptly described by Wexler, "In the psychologists view it would surely be an ironic tragedy if in the name of an illusory ideal such as freedom, the law were to deny the therapist the only effective tools he has to restore the chronic

psychotic to his health and his rightful place in the community".

(v) A Solution? The Least Restrictive Alternative.

One principle which may be used to guide the choice of which treatment method to use is the principle of the least restrictive alternative. This principle specifies that the individuals' freedom should be limited to no greater extent than that compatible with securing the specified treatment goal. This implies that stronger or more restrictive treatment techniques should be considered only when weaker treatments have been shown to be ineffective. Two problems exist with this rationale. First there is often insufficient information on which to base predications about the relative effectiveness of various techniques, nor is there a standard method concerned with how an effective technique should be measured. The possibilities for measurement are; fulfilment of an input criteria, records of therapy, periodic reviews of treatment and so on. Schwitzgebel (1972) have suggested that outcome measures would be the most valid approach. The difficulty with this approach is determining which are the most valid outcome variables. To some therapists attitude changes indicate an effective therapy, while others would choose variables such as, self actualisation. Behaviour modification techniques prefer empirical data to demonstrate the effectiveness of a treatment procedure. Secondly it may be difficult to determine which technique is more restrictive to the individual's freedom. Is a mild technique that takes a long time to modify the individual's behaviour effectively less restrictive than a more powerful treatment that procedures rapid results? However, in addition to these objective measures it is important that the acceptability of the treatment procedures should be evaluated by the

public.(Budd & Baer 1976)

At the present time any treatment procedure has to satisfy three socio-legal criteria namely the right to treatment, the right to effective treatment and the right to enjoy basic privileges. The difficulty in meeting these three criteria is that an effective therapy often involves denying a client basic privileges. The least restrictive alternative was proposed as a solution, in that the individuals freedom should be curtailed to no greater extent than that necessary for securing the goal of effective treatment. Once again difficulty has arisen in deciding what is the least restrictive and most effective alternative.

Budd and Baer (1976) suggests that this illustrates the need for subjective judgements in executing the least restrictive alternative. These judgements might best be made by an advocacy committee in consultation with staff and professionals. This argument was extended by Wolf (1978) who suggested that the acceptability of a treatment procedure should be judged by non- professionals, lay persons, clients and other potential consumers.

1.3 Recent Issues in Social Validation.

The need for social validation of treatment procedures does not arise solely from the legal and ethical issues that behaviour modification faces. A second aspect is that a treatment needs to be acceptable to the recipient. Studies suggest that the acceptability of a procedure influences its effectiveness. Clients are more inclined to participate in a treatment that they find acceptable. When the situation involves parents or teachers adminstering the procedures to

children then the acceptability of the procedure is again an important factor. Many therapies are often emotionally demanding and time consuming. The correct implementation of a procedure is dependent on the co operation of the parents or teacher with the therapist.

The third reason for social validation of treatment procedures should be the need for scientific information in the form of empirical data about public opinions and attitudes to treatments. This is proposed by both Garfield (1983) and Parloff (1983). Although they are referring to consumer satisfaction their suggestions are still applicable to research on the acceptability of treatment procedures. Garfield (1983) states "I suspect that I am a bit suspicious or uneasy about the current emphasis on consumer satisfaction as being a response to political or economic pressure rather than scientific ones". Parloff (1983) also states that he "doubts that the ethical issues faced by behaviour therapist persist today ... Behaviour therapy would be far better served by the continued production of credible scientific evidence of its usefulness as a treatment of bona fide patients and problems ". Even though Parloff does not consider the ethical problems to be major issues as they previously have been, it is still imperative that therapists are aware of them.

1.4 Social Validation between the 1960's and the 1970's.

The literature on social validation between 1965 and 1970 is sparse. Many studies have relied on verbal reports and anecdotal comments of clients as a measure of or indication of the acceptability of the treatment procedures. This type of information is not an accurate indication of what the consumer's attitudes are towards the treatment

procedures, but rather a response to the method of data collection. The attitude of clients is manipulatable. Those clients who are assertive and have strong opinions concerning the treatment may not hesitate to express negative feelings about the treatment. Whereas less assertive clients may feel obliged to express satisfaction with the treatment. This problem is especially severe if the anonymity of the client is not guaranteed. There is the problem of reactivity of verbal data (Frentz and Kelley 1986) where the responses of the clients are influenced by the interaction between the clients and therapists. The major criticism of verbal reports is that significant questions on the acceptability of various procedures are not answered. No comparisons are given between the acceptability of a treatment procedure in one study with the results in another study. Therefore we cannot tell if certain procedures are more acceptable to any particular group of individuals, such as adults or children, or any particular behavioural problems. There is no uniformity in the method of assessment. This criticism is also relevant to those studies that have used formal methods of assessment such as questionnaires. Many scales are both locally constructed and implemented. They also present little or no data on the reliability and validity of the assessment devices they are using (Bornstein and Rychtairk, 1983; Lebow 1983; Turkat and Forehand 1983). Criticism can also be made of the methodology (Lebow 1983), that is, there is both a lack of, information about the procedures used and a lack of control over the procedures used. Consequently these studies can not be replicated.

2.0 SOCIAL VALIDATION AFTER 1980.

2.1 Methodological Developments.

Kazdin (1980a) constructed the Treatment Evaluation Inventory (TEI) to assess the acceptability of treatment procedures. Treatment acceptability was considered to include such dimensions as: whether the treatment would be recommended or endorsed for broad application, whether it was cruel or fair, whether or not it would be applied to someone not capable of giving consent; and whether the treatment was consistent with commonly held notions of what a treatment should be.

Kazdin chose 16 items that both investigated acceptability along these dimensions and were relevant to treatment procedures used to correct children's disruptive behaviours. The acceptability of these items was rated using a 7-point Likert scale,giving item scores between 7 and 1, with 7 being most acceptable. An overall acceptability rating could be calculated from the TEI by adding the scores given to the individual items. This acceptability rating could range from fifteen to one hundred and five. A moderate acceptability rating is sixty.

The first implementation of the TEI (Kazdin, 1980a), involved subjects having to evaluate four different treatment techniques that could be used with children who had disruptive behaviour problems. Subjects were divided into groups depending on which of the two case descriptions, and the order of the treatment procedures they were

presented with. After reading the case description subjects had a treatment procedure described to them, they then answered each of the 16 items on the TEI. This process was repeated until all the four treatments were investigated. A second assessment device, the Semantic Differential, (Osgood, Suci and Tannenbaum, 1957) was also used. This comprised three dimensions: evaluative, potency and activity. Five items containing bipolar adjectives were included in each dimension. Both these assessment devices were shown by Kazdin to sharply distinguish the overall acceptability of the treatments.

A principal components factor analysis was carried out on the items in the TEI and the semantic differentials. Fifteen of the sixteen items in the TEI produced high factor loadings on a single component before rotation. One item in the TEI had a small loading on the single factor. This item was removed from the TEI. The evaluative dimension of the semantic differentials had a high loading on this factor suggesting that the TEI assessed the overall evaluative reaction of the students. The potency and activity dimension were low on the single factor that characterised items on the TEI. It is most unfortunate that the information presented concerning the factor analysis is a summary of the of the figures for factor loadings. No attempt is made to identify the single factor on to which these 15 items load. Nor is the psychological relationship between the items and the factor explained.

TABLE 1 SUMMARY OF ALL STUDIES USING TEI

YEAR	AUTHORS	RESPONDENTS	AIMS OF EXPERIMENT	PROCEDURES	SCORES
1980	KAZDIN	UNDERGRADUATES	Expt. 1. Assess TEI	Expt.1 – Reinforcement	M = 90
				– Timeout (P.1.)	M = 65
				– Drugs	M = 43
				– Electric Shock	M = 30
			Expt. 2. 2 Severity Levels	Expt.2 – Reinforcement	M = 90
				– Timeout (P.1)	M = 53
				– Drugs	M = 47
				– Electric Shock	M = 30
1980	KAZDIN	UNDERGRADUATES	Comparison of different forms of Time out	Expt.1 – Isolation	M = 44
				– Reinforcement	M = 82
				– Time Out (P.1)	M = 70
				– Withdrawal of Attention	M = 61
				Expt.2 – Withdrawal of attention and isolation	M = 58
				– Isolation and contingency contracting	M = 61
				– Isolation	M = 44
				– Reinforcement	M = 82
1981	KAZDIN	UNDERGRADUATES	Expt.1. 2 Effectiveness Levels	Expt.1 – Reinforcement	M = 84
				– Positive Practise	M = 73
				– Time Out (P.1)	M = 60
				– Drugs	M = 50
			Expt.2. 2 Adverse side effect levels	– Reinforcement	M = 54
				– Positive Practise	M = 76
				– Time Out (P.1.)	M = 60
				– Drug	M = 40
1981	KAZDIN etal	Parents, Children Staff at Psychiatric Institution	Comparison of 3 groups	– Reinforcement	M = 81
				– Positive practise	M = 72
				– Time Out (P.1)	M = 62
				– Drugs	M = 75

TABLE 1 Continued

YEAR	AUTHOR	RESPONDENTS	AIMS OF EXPERIMENT	PROCEDURES	SCORES
1984	KAZDIN	Children and Parents at Psychiatric	– 2 Levels of Effectiveness A = Children B = Parents	A – Time Out(P.1)	M = 65 S.D = 17
				– Drugs	M = 69 S.D = 14
				– Locked Seclusion	M = 62 S.D = 18
				B – Time Out	M = 83 S.D = 16
				– Drugs	M = 62 S.D = 24.7
				– Locked Seclusion	M = 64 S.D = 22
1985	SINGH & KATZ	UNDERGRADUATES	– Effects of Education Expt.1 – pre educational Expt.2 – post educational session	Expt.1 – Reinforcement	M = 82
				Humanistic Parenting	M = 73
				Positive Practise	M = 67
				Time Out	M = 54
				Expt.2 – Reinforcement	M = 82
				Humanistic parentry	M = 73
				Positive practise	M = 67
				Time Out	M = 54
1986	FRENTZ & KELLEY	MOTHERS	2 Severity Levels	– Response Cost	M = 84 S.D = 15
				– Time Out (P.1)	M = 67 S.D = 21
				– Reinforcement	M = 49 S.D = 23
				– Time Out	M = 49
				– With Spank	S.D = 20
				– Spanking	M = 43 S.D = 18

TABLE TWO

YEAR	AUTHOR	RESPONDENTS	ASSESSMENT DEVICES USED & AIMS	RESULTS
1983	NORTON etal	TEACHERS & PARENTS	-Comparison of Time out procedures. Two Questions: (1) "How effective do you think the procedures will be"? (2) "How acceptable are the procedures"?	A. The procedures rated most effective by teacher & parents B. The procedures rated most acceptable by teacher & parents A. – Reinforcement – Isolation plus Contract – Isolation – Withdrawal of attention backed by isolation – Contingent observation B. – Reinforcement – Isolation plus Contract – Isolation – Withdrawal of attention backed by isolation – Contingent observation
1984	WITT etal	TEACHERS	Aimed to develop an instrument to assess acceptability of procedures used in classrooms and identifying factors that contribute to teachers judgements of acceptability of interventions	Factor Analysis produced 5 factor Factor I – Appropriateness for the child Factor II– Amount of risk involved FactorIII– Amount of teacher time Factor IV– Effects on other children Factor V – Amount of Teacher skill required
1984	WITT etal	TEACHERS	Used 1RP to evaluate the acceptability of different treatments as a function of time involved in implementing the procedure and severity of behaviour problem	– Amount of teacher time involved has a significant effect on acceptability – low levels of teacher time is less acceptable for severe problem but acceptable for mild or moderate behaviour problems

2.2 Revelance of the TEI.

Kazdin's invention of the TEI has had a considerable impact in simulating research on the acceptability of treatment procedures. Table is a summary of all studies that have used the TEI to rate the acceptability of different treatment techniques used to correct childrens disruptive behaviour. The Table includes information on the aims of each of the studies, the respondents who were used to rate the treatments and the means (and where given the standard deviations are also presented). The distinguishing factor of Table is that assessment devices other than the TEI have been used to assess the acceptability of procedures used to correct childrens disruptive behaviours. Table two also includes two studies that have assessed the acceptability of procedures used with other behavioural problems, namely the treatment of agoraphobia. The summary tables are fundamental in understanding the social validation of treatment procedures.

Devices other then the TEI have also been designed to assess the acceptability of different treatments. Witt (1983) developed the Inventory Rating Profile (IRP). It aimed at assessing the acceptability of behavioural interventions used in classrooms. The IRP included 20 items that assessed such factors as whether the treatment was appropriate for a given problem, whether it required too much time to implement it, whether it adversely affected other children and whether it posed undue risk to the child. Each item was rated on a six-point Likert scale. The reliability of the scale was assessed by co-efficient alpha. A principle components factor analysis was performed which showed that there was one primary factor with several secondary factors. The primary factor reflected a

general concern that the intervention was appropriate and would help the child. The secondary factors appear to reflect the more specific aspects of the treatment acceptability, such as the amount of risk posed to the target child, amount of teacher time consumed by the intervention, the effects of the intervention on other children and the amount of skill required to implement the intervention. This study is he only study that presents a well ordered set of raw data that indicates the mean ratings for individual items on te IRP and a table showing the variances of the individual items accounted for by each factor. Witt's investigation showed that the acceptability of different treatment procedures was readily distinguishable.

Norton (1985) conducted three studies that evaluated the acceptability of alternative treatment procedures. Only one of these studies (Norton, 1983) involved procedures that were used for changing disruptive behaviour in children. The other two studies, (Norton 1983, 1985), investigated the acceptability of treatment procedures which are used in treating agoraphobics. The assessment procedure used in these two studies included two aspects: the acceptability and the effectiveness of the procedures. The general format of the assessment procedure involved the respondent rating four questions concerning the acceptability and four questions on the effectiveness of the procedure on a 9-point Likert scale. In Norton (1983) the assessment procedure was less structured. It involved the respondent rating two questions on a five point Likert scale. The two questions were basically, "How effective do you think this procedure is?" and, "How acceptable do you find this treatment procedure?" In all of Norton's studies no tests were used assess the relability or validity of these techniques.

2.3 EVALUATION OF STUDIES USING THE TEI .

The review of these studies will focus on three broad aspects. The first aspect is, can significant comment be made on the general acceptability of particular treatment procedures? Secondly, is there any evidence to suggest that the acceptability ratings given to certain procedures can be enhanced? Thirdly, is the present form of analysis improving the understanding of factors that effect the acceptability of the treatment procedures? These three factors, although interrelated, are more clearly illustrated when they are examined individually.

2.4 Is there any agreement on a general level of the acceptability of the treatment procedures?

The question of treatment acceptability is crucial in two main areas. The first area is that of legal and ethical decisions. For example as discussed above court rulings have decided that some procedures are unacceptable because they are an infringement of clients rights. To help protect clients rights, institutional committees have been set up. These committees include both professionals and laypersons who decide whether or not a particular treatment technique is acceptable. Laypersons are included because it is thought important that the committees be sensitive to the view of the general public regarding treatment acceptability. The second area in which treatment acceptabilty is important is where for some particular problems several effective treatment procedures are available. Treatments that are equal in effectiveness may vary greatly in their acceptability to consumers. The advantage of more acceptable procedures is that they are more readily sought, initiated and

adhered to than less acceptable procedures.

A criterion needs to be established to determine how well the acceptability ratings of the treatment procedures correlate between studies. There are two possible ways of doing this. The first method is to compare the mean scores of each individual procedure. The justification for this method is that the acceptability of procedure is based on it's total score. The objection to this method is that the majority of studies do not include a table of means and standard deviations relating to the results from the TEI. Therefore acceptability scores have to be extrapolated from the graphs that are presented. In several studies the means of the graphs are aggregate scores, that is, some studies include different treatment conditions that produce significantly different ratings in the acceptability ratings of the procedures. These different ratings are averaged to find one acceptability rating for both procedures. Although comparisons of the individual scores may indicate a difference in the acceptability of a procedure, without any information on the standard deviation the interpretation of these differences is limited. The second method is to compare the relative acceptability of a treatment procedure with another treatment procedure, i.e. is a procedure consistently rated in the studies as moderately acceptable or highly acceptable. Many of the studies that evaluate the acceptability of different treatment procedures have used different groups such as students, parents and children. Consquently an intergral part of evaluation of the acceptability of the treatment procedure is to investigate the ratings given by various populations.

(i) Medication.

This procedure involves the use of drugs that act on biological substrates to decrease such things as aggressive and hyperactive behaviour.

Four studies have investigated the acceptability of medication. Two of these have investigated the ratings given by students (Kazdin 1980a & 1981). The remaining two studies (Kazdin et al 1981) evaluated the acceptability of the procedure with parents, children and staff. These three groups of people were all involved in some form with a psychiatric institution either as parents with a child there, or a child, or as a staff member. The second study Kazdin (1981) included the same respondents, except for staff. Students' ratings ranged between 20 and 50 suggesting that medication was an unacceptable procedure. The ratings given by parents, staff and children indicated that they considered it to be an acceptable procedure. In Kazdin et al (1981) a composite mean score of 75 was given for all three groups of respondents. However the individual groups differed in their acceptability ratings with parents rating medication as significantly more acceptable than children, but not significantly different from the rating given by staff. The children's rating of the procedure did not differ significantly from that of the staff. In Kazdin (1984) children rated medication as more acceptable (mean score of 69) than the parents (mean score of 62). Although it is not possible to state from these results whether parents or students find the procedure more acceptable, it seems clear that both groups find medication an acceptable procedure.

(ii) Positive Practice.

Overcorrection differs from many other punishment procedures in that it aims to decrease inappropriate behaviour and simultaneously teach

the child the correct behaviour. It requires the individual practices the correct behaviour a number of times after the misbehaviour. In some situations the individual may need to be verbally or manually guided to perform the correct behaviour.

Positive practice has been evaluated in three studies (Kazdin et al., 1981, Kazdin, 1984; Singh and Katz, 1985). Both Kazdin (1981) and Singh and Katz (1985) used students as their raters. The mean score by students in Singh and Katz's study, before they had been exposed to the educational sessions was 67. In Kazdin's study the mean acceptability rating given by students was 76. The mean ratings of 72 given in Kazdin et al (1981) show that all three groups of respondents considered positive practice to be an acceptable treatment for disruptive behaviour by children. The comparison of positive practice with medication in Kazdin et al (1981) showed positive practice as being as acceptable as medication. In Kazdin (1981) positive practice is significantly more acceptable than medication. In all studies positive practice is rated more acceptable than time out.

(iv) Differential Reinforcement.

Differential reinforcement (or reinforcement of imcompatable behaviours as it is sometimes referred to) Emphasizes the application of positive consequences, such as stars, expressions of approval and special privileges. These consequencies are provided for behaviours that are imcompatiable with the disruptive behaviours.

Differential reinforcement has been evaluated in all studies using

the TEI. Kazdin refers to the procedure as reinforcement of incompatible behaviour. In every study, except Frentz and Kelley (1986), differential reinforcement was seen to be the most acceptable of all the procedures that have been evaluated. The published means indicate that the scores range from approximately 81 and 90. An approximation can only be given because the lowest score of 81 given in Kazdin (1981) is an average of the scores from three different populations. The children, who gave this procedure the lowest rating of the three populations, would have had to give this procedure a rating even lower than 81.

The acceptability rating given to differential reinforcement in Frentz and Kelley (1986) showed that a sample of mothers from the general public rated this procedure as being below a moderate level of acceptablility (mean=50, standard deviation = 23.93). Comparison with other procedures in their study showed that differntial reinforcement was less acceptable than time-out but equally acceptable as time out with spanking. This comparison is a dramatic contrast with the other studies where differential reinforcement is rated the most acceptable procedure used with children's disruptive behaviour. Frentz and Kelley's interpretation of this low rating is that the respondents viewed the procedure as ineffective. Their evidence for this comes from the analysis of the individual items in the TEI. There are only two questions that specifically ask the respondent how effective they think the treatment is. However no indication is given that these two items are the ones that were analysed. If the lowest rating was given to these two questions then the total score would be decreased by 12 at the most. If the procedure was given a low rating only because it was ineffective then the procedure should still be rated as moderately acceptable. As the

procedure was rated as less than moderately acceptable other items must have been rated as less acceptable also. It would be useful to know what these items may have been, that is, did the respondents feel less willing to use the procedure because it was ineffective? It is interesting to note that these results are the only ones that conflict with the results of other studies and that this is the only study which has used mothers recruited from the general public who have had no previous experience with psychological services as respondents. This study may indicate that the general public views differential reinforcement as less acceptable than previously investigated populations, such as staff of institutions, client children and their parents (Kazdin, 1981) and undergraduate students (Kazdin, 1980a,1980b,1981; Singh and Katz 1985).

(V) Time Out

The critical issue in time out is placing the individual in a less reinforcing situation, contingent on their inappropriate behaviour. The release from the time out setting is contingent on either the completion of a fixed duration of time or exhibiting of appropriate behaviour. There are three different forms of time out: isolation; in which the child is isolated from the source of reinforcement, exclusion; where the individual is removed from the area of reinforcement and non-exclusion time out, in which the individuals participation in on-going activity is lessened, but not eliminated, because time out is a procedure that can take many forms so that investigation must specify the particular form being investigated.

Two studies (Kazdin 1980, Norton, Austen, Allen and Hilton, 1983) have investigated various forms of time out. Kazdin study is

important because of the influence it has had on the interpretation of the results of subsequent studies investigating the acceptablility of time out procedures. In experiment one of Kazdin (1980b) students evaluated three different time out procedures. 'Isolation' involved taking the child to a room across the hall from the classroom that provided no reinforcing stimuli such as books or toys or contact with peers or teachers. 'Withdrawal of attention' involved the child staying in their seat but receiving no attention from either teachers or pupils. The third procedure was 'contingent observation'. This involved the child being removed from direct participation in class activities by having to sit on a chair on the periphery of the room. Although the child could not take part in the class activities they could observe the other children. The isolation procedure was evaluated as the least acceptable procedure (mean=44), withdrawal of attention was rated as moderately acceptable (mean=61) and contingent observation was the most acceptable procedure (mean=70). The aim of the second experiment was to increase the acceptability of isolation therefore the procedure was modified in two ways. First isolation was used as a back up for withdrawal of attention. This procedure was rated as moderately acceptable (mean=58), but less acceptable than withdrawal of attention in experiment one. The second modification was 'isolation with a contingency contract'. This procedure involved both the child and parent drawing up a contract describing the conditions regarding the use of the procedure and signing it. Students rated this procedure as moderately acceptable (mean=61). Isolation was also rated again (mean=44). All the procedures were shown to be significantly different from each other in their acceptability ratings. Kazdin suggested that his results showed 'contingent observation' and 'contingency contracting' to be the most acceptable time out procedures, and that the acceptability

of the isolation procedure is enhanced through variations. However comparison of the means shows that the addition of isolation to the withdrawal of attention made it less acceptable than withdrawal of attention used in experiment one.

A subsequent study by Norton et al (1983a) showed that their results conflict with those of Kazdin (1980a). In Norton et al (1983a) parents and teachers rated the acceptability and the effectiveness of the same time out procedures used in Kazdin's (1980b) study. Norton et al's results show some disparities with Kazdin's findings. First, contingent observation, which was rated the most acceptable timeout procedure in experiment one of Kazdin (1980b) was not significantly different in acceptability from isolation or 'withdrawal of attention backed by isolation'. Second 'isolation' or 'withdrawal of attention backed by isolation' did not differ significantly from each other. In both studies 'isolation with contingency contracting' was shown to be one of the most acceptable of the time out procedures. There are limitations in the comparisons of these two studies because of the different methods used to assess the acceptability of the procedures. As mentioned in section 2.2 no analysis concerning the reliability and the validity of the questions was done. Nevertheless this comparison indicates that Kazdin's results of contingency contracting and contingent observation may not be the most acceptable time out procedures.

Even though both these studies show that isolation is an unacceptable procedure Kazdin (1980b) states that the isolation procedure should not be eshewed: previous research has demonstrated that isolation in a time out room is much more acceptable than other alternatives such as, electric shock and drug therapy. Two important comments must be made with regard to this statement. The first is that when Kazdin

wrote, only one study had been done that investigated the acceptability of time out compared with drug therapy and electric shocks (Kazdin 1980b). Experiment two of this study showed that there was no significant difference between the ratings of the time out and drug therapy. Secondly the time out procedure involved the child being placed in a partitioned part of the classroom for ten minutes. This time out procedure is considerably different from the isolation procedure used in Kazdin (1980b) where the child was placed in a separate room across the hall from the classroom. The mean scores for the time out procedure in Kazdin (1980a) was 65 whereas the mean score for isolation was 44 indicating that the time out procedure of partial isolation is significantly more acceptable than isolation. This suggests that had the isolation procedure described in Kazdin (1980b) been used instead of the partial isolation procedure, medication would have been rated as more, or at least equally acceptable to isolation. Thus the terms partial isolation and isolation are sometimes used interchangably yet the acceptability of these procedures is different.

Comparison of time out scores of different groups of respondents.

Three studies (Kazdin 1980a, 1981 and Singh and Katz 1985) have used the TEI to investigate students acceptance of the 'time out' procedure, in which time out involved partial isolation. These studies indicate a certain amount of variation the acceptability of time out. The lowest mean rating (53) was given in experiment two of Kazdin (1980a). This a composite score of two levels of severity. Students in Singh and Katz (1985) also gave a mean rating of 53 to rated the time out procedure before education. The highest that the students gave to the time out procedure was in experiment one of

Kazdin (1980a mean = 65). This suggests students find time out a moderately acceptable procedure. Two studies have evaluated the acceptability ratings that parents and children have given to time out, (Kazdin, French and Sherick 1981) and, Kazdin (1981). The later study also included the ratings given by staff. The acceptability ratings given in these studies suggest that parents and staff rate time out as a highly acceptable procedure. The mean score for time out in Kazdin et al (1981) was 62 but again this is a composite score. Parents rated the procedure significantly higher than children (but not staff) therefore ratings higher than 62 must have been recorded. In Kazdin (1981) the mean score given by parents was 83.5. In both studies ratings were given by parents whose children were receiving therapy in psychiatric instituations. Frentz and Kelley (1986) evaluated the ratings given by mothers who had, had no previous experience with psychological services. Their mean acceptability score was 67.28. Although there is a range in the acceptability scores in these three studies, results suggest that parents find the time out procedure more acceptable than do students.

The acceptability ratings of children have also been investigated. Again the difficulty with the composite means is evident. The mean composite rating of 62 given in Kazdin et al (1981) is higher than the rating of 65.9 given by the children in Kazdin (1984). Since only two studies have been done no firm conclusions can be drawn. It is possible that children and students give similar ratings to the procedures.

Comparison of time out with other procedures.

An overview of the studies that compare time out with other procedures reveals that in many instances the results are anomalous. Time out has been rated as more acceptable than strongly aversive treatments such as electric shock (Kazdin 1980a), spanking and time out with spanking (Frentz and Kelley 1986) and locked seclusion (Kazdin 1984). These comparisons suggest that the time out procedure of partial isolation is not considered to be strongly aversive, as suggested by Kazdin (1980b). As shown in the comparisons of the results of Norton (1983) and Kazdin (1980b) the pattern of ratings found in one study will not necessarily be repeated in subsequent studies. This is illustrated in the comparisons of time out and medication or, as it is called in some studies, 'drug therapy'.

Four studies have compared these two procedures. Two of these studies have used students as the respondents, the remaining two have used parents and children (Kazdin 1984), and staff as well (Kazdin et al 1981). Time out was rated by students as more acceptable than medication in experiment one and equally acceptable as medication in experiment two of Kazdin (1980a). In Kazdin (1981) students rated time out as significantly more acceptable than medication. Kazdin et al (1981) showed that all three groups of respondents rated medication as a significantly more acceptable procedure than time out. Medication was rated as a highly acceptable procedure, whereas time out was rated only as moderately acceptable procedure. These findings are only partially replicated in Kazdin (1984). In Kazdin (1984) the children rated medication as more acceptable than time out. These studies do not evince whether time out is more or less acceptable than medication although there may be an indication that, to children, medication is a more acceptable treatment procedure than time out. These studies highlight the need for more research into

the relative acceptability of these two procedures.

Two studies (Kazdin, 1981, Kazdin 1981) have compared the acceptability ratings of time out and positive practice. In both studies time out was rated as significantly less acceptable than positive practice. To date only two studies have evaluated these two procedures therefore the only statement that can be legitimately proposed is that there appears to be no difference in the acceptability ratings between parents and students and that the findings suggest that positive practice is a more acceptable treatment to be used in treating childrens disruptive behaviour.

In section 2.4 (iv) time out was shown to be a less acceptable procedure than differential reinforcement in every study except that done by Frentz and Kelley (1986). Like differential reinforcement, time out has been one of the most thoroughly investigated procedures. Yet the acceptability of time out is not nearly as well established.

2.5 Summary:

The original question was: "is there any agreement, on a general level, of the acceptability of the treatment procedures." The four main treatment procedures that have been discussed are, medication, positive practice, differential reinforcement and time out.

Differential reinforcement has been one of the most investigated procedures. All studies accept one have shown differential reinforcement to be a highly acceptable and the most preferred treatment. The one exception (Frentz and Kelley 1986) shows differential reinforcement to be neither a highly acceptable procedure nor the most acceptable procedure. This difference is possibly due to the use as respondents of a group of mothers chosen randomly from the population who had no previous experience with psychological services.

Medication is a procedure that varys in its acceptability and in comparison with other treatments. In particular in the comparison between time out and medication it is unclear which procedure is the most acceptable. This problem has been intensified by the use of composite means and incorrect comparisons. For example Kazdin (1980b) states that isolation is a more acceptable procedure than medication, however these two treatments have never been compared.

Positive Practice is consistently rated as an acceptable

procedure in all studies. There is evidence to suggest that different populations, namely parents and staff find it a more acceptable procedure than do other groups such as children and students.

The acceptability of time out is most unclear, especially when it is compared to medication and positive practice. Like medication time out seems to be more acceptable to parents and staff and less acceptable to students and children. There is also additional confusion as to which of the various forms of time out is the most acceptable. As shown in the comparison between Kazdin (1980b) and Norton et al (1983a).

A criticism that is revelant to every treatment procedure that has been investigated is that a single study investigating the acceptability of various procedures only give an indication as to how a particular group of respondants rate a procedure, instead researchers interpret their results (or others) as showing proof.

With these apparently glaring variations in the acceptability of various procedures it would follow that researchers' would attempt to explain some of these differences. Norton suggests that the differences between parents and students is due to students having more liberal attitudes. This idea seems to conflict with results which suggest that parents rate both medication and time out as more acceptable than do students (Kazdin et al 1981; Kazdin 1984; & Frentz and Kelley 1986). These differences suggest that those who are in direct contact with administering the procedures to the children rate the

procedures as more acceptable than those who have had limited experience with children, especially with trying to correct their disruptive behaviour. This is an area that definitely needs to be acknowledged, so it can be more thorougly researched. It appears that some of these anomalies in the research for example, the differences in the ratings of parents and students have been ignored. A greater understanding of the various levels of acceptability can only be reached if these problems are directly addressed. If additional research suggests that there are significant differences between these groups this could have important implications in deciding whether or not committees that have been set up to evaluate the acceptability of treatment procedures should be comprised only of people who have had some experience with children. These findings may indicate some tension between different groups of people. Analysis of the response to individual questions in the TEI could indicate the areas in which these differences occur. This could lead to a greater understanding of the factors that effect the acceptability of various procedures and might produce additional information that might aid in increasing the acceptability of different treatment techniques.

2.6 Can the alteration of various circumstances enhance acceptability ratings?

Research into the acceptability of alternative punishments for children has examined various factors that may influence respondents. These are (i) the age sex and setting of the child in

the case description, (ii) the effect of educational sessions (iii) the time involved in administering them and finally (iv) different levels of severity of the behaviour problem, side adverse effects and efficacy of the treatment procedures.

(i) The Effects on Acceptability of Child in the Case Description.

Norton et al (1983a) suggested that they had found important new information, namely (1) different groups may differ in their ratings of what is acceptable, and (2), what is acceptable for one age group may not be for another. Examination of their results show that the question concerning the effectiveness and not the acceptability of the procedures was influenced by the age of the child. The only factor that influenced the acceptability ratings of procedures was that teachers ratings of reinforcement were significantly different from that of parents. All the procedures except reinforcement were rated by parents and teachers as more effective for five year olds than ten year olds. Reinforcement was rated as more effective for ten year olds. Teachers consistently rated all procedures as more effective for children than did parents, but t-tests showed that only reinforcement was rated as significantly more effective. Only one other study (Kazdin, 1984) showed that the gender and the IQ of te child effected the acceptability ratings of the procedures. The remaining studies (Kazdin 1980a, 1980b; Kazdin et al 1981; Singh and Katz 1985) showed that conditions in the case description had no significant effect on the acceptability of the procedures.

(ii) The effect of Educational Sessions.

Singh and Katz (1985) compared students ratings of the acceptability of four treatment techniques that could be used for disruptive behaviour of children. Three of these treatment techniques, differential reinforcement, positive practice and time out were behavioural treatments. The fourth procedure, humanistic parenting, was included as a control. Preliminary results showed that Differential reinforcement, followed by humanistic parenting and positive practice, were the most acceptable procedure. Time out was rated as the least acceptable procedure. The second aspect of the treatment investigated the acceptability of the procedures after the students had received instruction on three behavioural treatments. The instruction was given in three, one hour weekly sessions which concentrated on one behavioural procedure at a time. For each treatment technique the positive effects and possible adverse effects were stressed. As well as this the subjects were given a basic description of the procedures and their implementation. During the fourth session, students were shown a film called "Harry" (Foxx, 1981) which illustrated the practical use of reinforcement and time out. The results of the second acceptability ratings showed that each of the three behavioural approaches was judged more favourably than before and there was no longer any consistent differences between them. The ratings on humanistic parenting also declined. The extent to which these results are seen as showing conclusively that the instruction given to the students caused the increase in the acceptability of the treatment techniques need to be verified by additional research.

It is possible that the students knowledge of the procedures acquired from previous exposure to the treatment techniques influenced the ratings given in the second study. The second criticism of the study concerns whether humanistic parenting can be legitimately called a control procedure. One question that seems unanswered by the study is, "had the students been given an instructional session on humanistic parenting would the procedure still have decreased in its acceptability"? While Singh and Katz do not address this issue, they do suggest that subsequent studies should include a control group of subjects that do not receive the intervention. This study raises an issue of would the acceptability rating of a procedure be altered if the respondents were asked to rate a single procedure rather several procedures?

(iii) The Effect on acceptability of the Time involved in Administering Procedures.

Acceptability of treatment procedures is also likely to be influenced by the time taken to administer them. Evidence to support this comes from two studies that have been done by Witt and his colleges. In the first study Witt et al (1983) the results of the factor analysis showed that the secondary factors of acceptability concerned such things as increased risk posed to the target child and the amount of teacher time involved in implementing the procedure. The second study, (Witt, Martens and Elliott 1984) investigated the influence of teacher time involvement, intervention type and behaviour problem severity on teachers judgments of the acceptability of the procedures. The results showed that interventions that required low levels of teacher involvement were viewed as significantly less acceptable

for severe behaviour problems. Positive interventions were more acceptable for low levels of teacher time and reductive interventions were more acceptable for moderate levels of teachers time. These studies illustrate the usefulness of factor analysis in identifing the issues that are related to the acceptability of procedures used in the school setting. The first study (Witt, 1983) identified the factors and these factors were then used to structure the description of the procedures in the second study (Witt et al, 1984).

(iv) The Effect of severity, adverse side effects and efficacy on the acceptability of the treatment procedures.

The effect of the severity of the behaviour problems will be considered first. Two studies (Kazdin, 1980a; Frentz & Kelley, 1986) have compared the effect that behaviours that are described in terms of either severe or mild problems have had on acceptability ratings. Both studies showed that the acceptability ratings for all the treatment procedures increased for those behaviours that were described as being severe problems. These results seem to indicate that some treatment procedures may be seen as less acceptable than others because they are relatively harsh. However, when the behaviour problems are severe, then harsher treatment procedures, such as time out, may be more necessary and therefore more acceptable.

The effect that additional information has on the adverse side effects of the treatment procedures has been investigated by Kazdin (1981). The adverse side effects associated with the behavioural interventions were described as producing untoward emotional

reations, escape and avoidance and aggression. Adverse side effects of medication were drowiness, nausea, headaches, difficulty in falling asleep at nights and loss of energy. This experiment showed that strong adverse side effects were assoicated with a decrease in the acceptability ratings of all the procedures. To date this has been the only study that has investigated adverse side effects.

The final aspect to be considered is the relationship between the acceptability of the treatment procedure and its effectiveness. Theoretically, the acceptability of a treatment procedure is inextricably linked to it's effectiveness, in that a procedure that is described as completely ineffective should have a lower acceptability rating than if it was described as extremely effective. Two studies (Kazdin, 1981; 1984) presented respondents with a questionnaire where the efficacy of the treatment porcedure was described as being strong or weak. Students acceptability ratings were not affected by the efficacy of the treatment procedures. Kazdin's explanation of this is that differences in acceptability due to treatment effects may have been apparent had the treatments been described as either producing marked effects or none at all. However in Kazdin (1984) both children and parents rated those procedures that produced marked effects as more acceptable than those producing weaker effects. The disparity in these results is left unstated, and it would appear that the procedures that are described as producing marked or weak effects do alter the acceptability of the procedure. This finding contradicts that given to explain students ratings given by Kazdin (1981).

Little mention is made (Kazdin, 1981) about the relationship between the acceptability of a treatment procedure and its efficacy. It is however a very important issue. There are several important ethical issues that need to be considered in relation to the effectiveness of a treatment procedure. Wolf (1978) states that "a therapist is ethically responsible for providing treatment which is both effective and acceptable to the consumer". This can present a problem for the therapist, who is to determine what is an effective treatment and how? No therapist can be absolutely certain of the extent that a procedure will be effective. The second ethical problem is that of trying to find the balance between procedure that is effective and acceptable to the recipient. Parloff (1983) states in his article on consumer satisfaction with therapies "The patients expertise in judging 'acceptability' of a practice and procedure is not an adequate substitute for authority to judge need for services or their appropriateness ... it is not sufficient to know that patients liked what they got without establishing that patients got what they needed as judged by experts". This is illustrated in Norton (1983b) where, apparently, a procedure that was acceptable need not be desirable. Anecdotal comments that were made by agoraphobic respondents suggested that even though the procedure terrified them, if there was a possibility that it would be successful then they would be prepared to try it.

This review of the literature on the acceptability of treatment procedures for children's disruptive behaviour has aimed to find out which treatment procedures are the most acceptable. It has investigated the procedures along several broad categories: (1) the level of general acceptability among treatment procedures; (2)

the question of whether the acceptability ratings of procedures can be increased and by what procedures; (3) the factors that affect acceptability.

Comparisons of the procedures are complicated by the different assessment devices and forms of analysis used. These are the TEI developed by Kazdin (1980a), the IRP developed by Witt et al (1983) and the two questions developed by Norton (1983a). The review was further complicated by the authors practice of ignoring alternative explanation of the results. It is obvious that the acceptability of some procedures (eg. time out) varies considerably from study to study. No explanation is given as to why these variations occur. Also the results of some studies are misinterpreted, for example, Kazdin (1980b) suggests that isolation is a more acceptable procedure than medication however various forms of time out differ markedly in their acceptability and the most acceptable form of time out was shown to be as acceptable as medication in experiment two of Kazdin (1980a). Although this has been implied in reviewing the studies it is important to state that because the acceptability of procedures vary several studies are needed to adequately assess the same procedures. The groups of respondents which have been used in these studies are a very biased sample of the population. Only one study (Frentz and Kelley, 1986) has investigated the acceptability of the treatment procedures with people who are not students and who have had no previous experience with psychological services. Singh and Katz (1985) and Kazdin (1980a) acknowledge this as a weakness in the studies. Even though Frentz and Kelley (1986) used people randomly chosen from the general population their sample included only females.

2.7 Are the present forms of analysis adequate?

The final criticism of the research concerns the analysis of the results of the studies using the TEI. Kiesler (1983) states in his literature review that there is a need for greater attention to alternative explanations. Bornstein and Rychtarik (1983) when reviewing the literature that has investigated the clients satisfaction with treatment techniques stressed the need for data on the frequencies of consumer responding at various levels of satisfaction. These criticisms can also be applied to studies using the TEI. This
limitation in the research has been recognised by Kazdin (1980a) when he states "The long term goal is not really to catalogue different clients reactions rather the purpose is to evaluate those variables that may influence evaluations of potential consumers, so that highly effective procedures may be altered in light of these variables". Unfortuately these criticisms are applicable to the reseach that has been done with the TEI. Very few studies give a table of means and standard deviations for the total scores of each of the treatment procedures. However the main criticism is that seven years after the first study we are not closer to understanding some of the factors that influence the acceptability of various treatment techniques. Present research with the TEI has only catalogued the different reactions of clients to procedures. This is to be expected if the only form of analysis is an analysis of variance on the total scores of the procedures and other related factors such as severity, efficacy and so on.

2.8 AIMS OF THIS STUDY.

This study sought to advance the field in two ways (1) respondents were recruited from the general public (2) the analysis of the TEI was concerned with the responses to individual questions. Apart from Frentz and Kelley (1986) the acceptability to the general public of various procedures has not been studied. Their attitudes towards punishment are important not only because they are sample from the population, but also because the acceptability of procedures used to correct childrens disruptive behaviour is important to all members of the community.

The case descriptions describe the disruptive behaviour in two settings: at home and at school. The rationale for this is that majority of procedures for disruptive behaviour are implemented in the home or school situation. There are also conventional and legal contraints on the use of some punishments at school, while parents rights to punish their children are much less constrained by social custom or law.

Five treatments techniques which have been used to correct childrens disruptive behaviour were investigated in the present study. These were time out, response cost, overcorrection, social reprimands and physical punishment. These procedures were chosen because of their current use in both home and school situations. Four of these procedures have been previously rated: time out (Kazdin,1980a, 1980b, 1981, 1984; Kazdin, French & Sherick, 1981; Norton, 1983; Frentz & Kelley, 1986; Singh and Katz, 1985; and Witt, Martens and Elliott, 1984); overcorrection and positive practice (Kazdin 1981; Kazdin et al, 1981; Singh and Katz, 1985);

physical punishment (spanking) and response cost (Frentz & Kelley, 1986). The remaining procedure, social reprimands is one of the most extensively used procedure, but its acceptability has never been evaluated.

There are few studies that have investigated the use of social reprimands. Thomas, Presland, Grant and Glynn (1978) examined the rates of praise and reprimands in ten grade seven classrooms in New Zealand and found the overall rate of reprimands was 58 per hour. It seems that social reprimands are often the first method of choice in correcting the disruptive behaviour of children. This is possible as they are easy to deliver and there are few objections to their use, as it is considered to be a very mild form of punishment. There is little data on the effectiveness of social reprimands. Forehand, Roberts, Doleys, Hobbs and Resick (1976), Doley, Hobbs, Roberts and Cartelli (1976) and Van Hountens (1982) suggests that reprimands are more effective when they are combined with physical contact such as a hand on the shoulder and eye contact, and are given in close proximity to the child. The effectiveness of reprimands is dramatically increased when it has been combined with a more aversive procedure (Dosey, Iwata, Ong & McSween, 1980).

Response cost though previously evaluated has not been defined. It is based on the premise that the cost of a response affects the rate of performance of that response, (Kazdin, 1972; p533). There are three variations of response cost depending on the way points, tokens or privileges are received. Individuals can be given points at the beginning of the day which can be lost with the occurrence of undesirable behaviours. Or an individual can gain or lose

points contingent on appropriate or in appropriate behaviour. The third variation is a group contingency: each member of the group can gain or lose group points through their behaviour. The response cost procedure used in this study is based on one described by Iwata and Bailey (1974) where the child is given a predetermined number of tickets at the beginning of the day. Unlike time out, where the opportunity to earn or consume reinforcing consequence following a response is withheld, "response cost involves the removal of previously provided or earned, positive stimuli contingent upon the occurrence of an undesirable behaviour. (Pazulinec, Meyerrose and Sajwaj (1983 p.71) Response cost offers the child the possibility of receiving rewards for desirable behaviours such as extra pocket money. Response cost has been shown to be effective in the classroom (Iwata and Bailey, 1974) and also in residential settings such as at home (Matson, Stephens and Horne, 1978). Also with normal children with aggressive and disruptive behaviour (Ollendick and Matson, 1976; Matson, Horne and Ollendick, 1979).

Overcorrection differs from the other punishment procedure in that it aims to decrease inappropriate behaviour and simultaneously teach the child the correct behaviour. The individual practices the correct behaviour a number of times after the misbehaviour. In some situations the individual may need to be verbally or manually guided to perform the correct behaviour. As a result of this the individual experiences the effects normally felt by those who correct the misbehaviour. As the procedure is instituted immediately following the misbehaviour the individual as little or no time to enjoy their misbehaviour or its consequences.

The time out procedure used in this study is exclusion time out. This time out method has been evaluated by Kazdin (1980a, 1981, & 1984) Kazdin et al (1981), Frentz and Kelley (1986) and Singh & Katz (1985). In these studies the children in the cases studies were placed in either a partitioned part of the classroom, or a quite room in the house.

There are a range of aversive procedures that are both punitive and controversial. These aversive procedures include such things as contingent application of aversive smells, sounds and tastes, removal or distortion of visual stimuli; the production of novel aversive physical sensations, watermist spray and physical punishments. These procedures are more commonly used with the mentally retarded in institutions. Available data suggests that of theses, physical punishment is the only one of the aversive procedures used in (some) school settings. Physical punishment (coporal punishment) in schools is illegal in some states in America and much of Europe. In New Zealand, corporal punishment is not illegal but many schools have prohibited it's use. There are clear indications from educational authorites that the law regarding the use of physical punishment will be changed, so that it is an illegal form of punishment. Physical punishment is contingent only on those behaviours that are physically harmful to themselves or other children.

3.0 METHOD.

3.1 Subjects.

The participants were 201 people of which 84 males and 115 were females (2 subjects failed to indicate which sex they were) were sampled from the general public of Christchurch. They were aged 17 years and upwards. The participants were asked to give details of their; level of education and the number and ages of children (if any) parented by the participant.

The participants were selected from 6 Christchurch constituencies ; Yaldhurst, Fendalton, Syndneham, Christchurch North, Christchurch Central and St Albans. Four of these electorates were a similar size (the size ranged from 23,140 to 23,796). Thirty three participants were sampled from each of these electorates. Yaldhurst electorate was larger with 1000 more voters on the electoral role. To ensure each individual on these electoral rolls had the same chance of being selected 35 more participants were sampled from the Yaldhurst electoral roll. The electoral rolls were used to randomly obtain streets. Every electoral roll had both the pages and the voters numbered. A table of random numbers was used to get random numbers for the page and voters address. A total 33 street names were chosen from the Yaldurst electorate while 35 street names were chosen from the remaining 4 electorates. Every house in these streets was then visited until the required number of participants from that electorate was reached.

3.2 Procedure.

The majority of the visits were done on week days between the hours of 10.00 am - 12.00pm and 1.00 pm - 3.00pm. On two occasions visiting was conducted on Saturday from 2.00 pm - 5.00pm. All the houses in the street were visited once. Those people who answered the door were told a standard phrase which was:
Hello, I am from the Psychology Department at the University of Canterbury. I was wondering if you would be interested in answering a questionnaire on Alternative Punishments for Children.

Those who were interested in completing the questionnaire were given a brief explanation of how the questionnaire was concerned with their own opinions of the procedures. The front page of the questionnaire contained instructions not to look forward or back to previous responses and to complete one set of questionnaires at a time. The questionnaire was left for the participant to complete by themselves. The participant was asked to complete the questionnaire by the following day. A later date was arranged if that was inconvenient.

3.3 Questionnaires.

Each participant was given a questionnaire to fill in. The questionnaire contained one case description and 5 treatment procedures which were presented in a -by- latin square design. The questionnaire that each participant received was randomly selected from 4 different questionnaires which varied in the case description they incorporated.

The Treatment Evaluation Inventory (TEI) designed by Kazdin (1980) was used to evaluate the acceptability of 5 treatment procedures. The TEI was comprised of fifteen items that the participants were asked to rate on a 1 to 7 point scale of acceptability. The items asked the participants questions such as, how cruel they thought the treatment procedure was, how effective was the treatment likely to be and so on. The TEI is reproduced in appendix 1.

3.4 Case Descriptions.

Four case descriptions were used, each based on the case description of Jackie an eight year old girl described by Kazdin (1981). In all the four case descriptions the disruptive behaviours are the same, but the setting and gender change. Two of the case descriptions outline Sally's or John's behaviour in the classroom. The other two case descriptions outline Sally's or John's behaviour at home. Sally/John was 10 years old ,of normal intelligence and in a standard four class at school. Sally's / John's behaviour was described as both verbally and physically aggressive towards other children in her / his class as well as noncompliant with the teachers requests. At home Sally's / John's behaviour was verbally and physically aggressive towards siblings and friends, as well as noncompliant with parental requests. Professional help had been sought as the disruptive behaviours were worsening.

3.5 Treatment Conditions.

After the participant had read the case description, they then read

the first of 5 treatment conditions. The order in which the treatment procedures were presented was randomised. The first treatment was followed by the two dependent measures. Then this was followed by the second treatment and the two dependent measures and so on.

The treatments used in this study were punishment procedures that were currently being used in, institutions, schools and homes. The five treatment procedures were, time-out, positive practice overcorrection, social reprimands, response cost and physical punishment. Each of the treatment procedures was based on treatment procedures used in previous studies (expect for response cost and social reprimands). Each procedure was described in such a way that it was specific to the case description. The time-out procedure was based on Kazdin's study (1981). The child was placed in partial isolation for no longer ten minutes. However the time could be reduced from that ten minutes if the child was quiet for two minutes. In the home the time-out procedure consisted of sitting in a room such as the bathroom so that the child would not have any access to reinforcing activities, rewards or contact with others. In the classroom time-out consisted of sitting in a partitioned part of the classroom. The timeout procedure was used after each instance of the undesired behaviour.
Overcorrection consisted of repeating the appropriate behaviours immediately after the inappropriate behaviours occurred. The overcorrection procedure was based on the positive practice procedure used in Kazdin's study (1981). The overcorrection procedure was explained to the participant using an example which was, the child refusing to come to the parent / teacher when requested to. In the treatment procedure the child was required to

come to the parent / teacher and apologize for not having come when first asked. This procedure was repeated five times.

The social reprimand was based on a procedure described in Van Houten, Nau, MacKenzie-Keating, Sameoto and Colavecchia (1982). It consisted of the parent / teacher going up to the child and placing their hand on the child's shoulders and telling them to stop the undesirable behaviour they had been engaging in.

The response - cost procedure was based on that used by Iwata and Bailey (1974). At the beginning of each day the child was given a set of paper tickets. Each time a disruptive behaviour occurred one of the paper tickets was destroyed. If there were any tickets remaining at the end of the day then a tangible reward was given to the child. If all the tickets were used up and the child's inappropriate behaviour continued, each further disruptive behaviour meant the loss of a privilege such as an earlier time to go to bed.

The physical punishment procedure was modified from a procedure used by Romanczyk, Colletti and Plotkin (1980). The child was physically punished each time there was an instance of verbally aggressive or noncompliant behaviour. The child was not physically punished for physically aggressive behaviour. The child was told why they were getting the physical punishment and then they were given a smack on the hand with a small wooden ruler. The physical punishment was given in a place where no one else was present.

4.0 RESULTS.

Charactertics of this Sample.

Sex ratio:

Women comprised 58% (115/84) of the respondents, giving a female to male ratio of 1.37:1. Women are therefore over represented in this sample relative to the overall female : male ratings in the New Zealand population, which was 1.02:1 as at 31 December 1985. However, the ratio is higher in urban areas, which was the force of this sample (New Zealand Official Yearbook, 1987).

Age Distrubution:

Table 3 gives the age distribution of the respondents, compared with the distribution for the New Zealand population (as for the 1981 census).

Table 3.

Comparison of the between the frequency of respondents in age categories (expressed as a percentage) with those of the New Zealand population.

AGE	N(sample)	%Sample	%N.Z
17-20	18	11	9.4
21-25	33	16	8.4
26-30	31	15	
31-35	36	18	27
36-40	20	10	
41-45	22	11	
46-50	19	9	30
50+	21	10	

(Source: New Zealand Official Yearbook 1987)

It is important to note that the matching of sample to the New Zealand population is only approximate because category boundaries do not always match exactly.

As Table 3 shows, the sample was some what over representative of those aged less than 25, substantially over representative of those in the middle group (26-45) and substantially under represented those over 50, relative to the New Zealand pakeha population norms.

Educational Attainment.

The educational attainment of the respondents is shown in Table 4, where it is compared with the educational attainment of school leavers in 1963. Comparisons are confounded by change over time in the different cohorts. Given a sample of respondents from many different age cohorts, it is somewhat arbitrary which cohort is used for comparison. The cohort of those who left school in 1963 was chosen (a) because the data was available for that year and (b) the age of that cohort was reasonably close to the mean age of the sample, and to the age if the most numerous group within the sample.

Table 4

Comparison between the education level of school leavers in 1963 and those individuals sampled from the general public.

Attainment	Sample %	1963 Cohort %
Secondary, without qualification	18	47
School Certificate	11	20.5
Sixth Form Certificate	5	18.5

U.E. or higher	65	15

This data shows that the sample of respondents were much better educated than is characteristic of the population as a whole. This means that the finding of the study should be regarded as representing the views of the better-educated, rather than of the "typical" New Zealander.

Family Characteristics

Fourty percent of respondents lived in a family without children and had never had children. Fifteen percent had pre-school children and 31% had children attending some education institution (primary, secondary or tertiary). Fourteen percent of respondents had children who were grown-up (ie. over 19 years of age).

4.1 Acceptability ratings:

The ratings given by each respondent to individual items was summed within the each procedure to yield a total acceptability score. The minimum score was 15 and the maximum score was 105. The scores were entered into an analysis of variance using the BMDP Statistical Software package. The analysis of variance was conducted with the BMDP2V programme. BMDP2V performs an analysis of variance (or co variance) for repeated measures models with unequal or equal cell sizes. In this study the grouping factor is the setting, home or school, and the sex of the child in the case description. The within-subjects factor is the five different treatment procedures that the respondent rates. The grouping and within-subjects factors are all fixed effects factors. Each

respondent is observed at all combinations of the within-subject factor levels, but only at one level of each grouping factors i.e. either home or school,male or female. Table five shows the means and standard deviations of the acceptability ratings of each of the cells in the ANOVA table.

V

TABLE 5.

Acceptability Ratings: Means and standard deviations (in brackets) for each of the five treatment procedures, their marginal ratings, the marginal ratings for boys and girls in both settings and the means for boys and girls.

	male home	male school	female home	female school	marginal
SR	79.32 (14.86)	78.52 (15.40)	76.61 (15.55)	78.42 (17.03)	78.21
PP	54.52 (18.50)	51.56 (22.94)	59.17 (22.07)	40.52 (21.80)	51.50
TO	67.4 (18.90)	72.98 (22.93)	67.86 (20.95)	66.44 (23.41)	68.66
RC	78.98 (16.91)	79.44 (13.67)	77.94 (17.41)	77.38 (19.57)	78.43
OC	61.82 (18.52)	54.72 (21.70)	68.35 (17.70)	58.27 (22.07)	61.07
		marginal			
	68.4	67.44	69.98	67.57	

Means for both Sexes

67.9 67.19

The sex of the child did not significantly effect the acceptability ratings given to the various punishment procedures. The combined mean score for setting and treatment procedures for was 67.9 for males and 67.19 for females. However the setting (home vs school) did procedure a significant difference in rated treatment acceptability. Overall procedures punishment is rated as slightly less acceptable at school (mean =65.9) than at home (mean = 69.2). The setting main effect was significant ($F = 4.98$, $df = 1, 197$; $p < 0.05$).

Results of the Interaction Effects.

There was also a significant interaction between the treatment and setting ($F = 5.05$ $df = 4, 788$; $p < 0.001$). The data of table five show that this was due to principally to physical punishment and overcorrection being rated as less acceptable at school than at home. Planned comparison t- tests, comparing home and school acceptability ratings separately for boys and girls showed the following. There were no differences in the acceptability ratings given to treatments between boys and girls at home. Neither were there any significant differences in the acceptability ratings of treatments given to boys at home and at school. However it was less acceptable to use physical punishment with girls at school than with boys at home ($t = 3.46$, $df = 98$, $p < 0.01$) and it was also less acceptable to physically punish boys at school than girls at home ($t = 3.46$, $df = 99$, $p < 0.01$). Compared with the home setting where there is no gender difference in the acceptability of physical punishment, it was found that physical punishment for

girls at school was less acceptable than for boys at school (t = 2.47, df = 98, p< 0.01). In the school setting, the use of overcorrections was less acceptable than at home (t = 2.47, df = 99, p< 0.05). While the trend for boys was similar (home mean = 62, school mean = 55) there was no significant difference.

TABLE 6.
Mean Acceptability ratings for punishment and overcorrection, plus t-values illustrating the Treatment x Setting interaction.

PHYSICAL PUNISHMENT.

VMale home: mean = 54.52 Female school: mean = 40.52

S.D. = 21 .79 S.D = 21.7989

(T= 3.46 df, 98 p < 0.01)

Female home: mean = 58.1569 Female school: mean = 40.52

S.D = 22.0729 S.D. = 21.7889

(T= 4.27 df, 99 p < 0.01)

Female school: mean = 51.56 Male school: mean = 40.52
S.D = 22.93 S.D = 21.7189

(T=2.47 df, 98 p < 0.05)

OVERCORRECTION.

Female home: mean = 68.3529 Male school: mean = 54.72
S.D = 17.6973 S.D = 21.7012

(T = 3.46, df = 99 p < 0.01)

Female home: mean = 68.3529 Female school: mean = 59.26
S.D = 17.6973 S.D. = 22.0656

(T= 2.29 df, 99 p < 0,05)

Results of the factor analysis.

The analysis of complex arrangements of numbers into a number of more elementary units, enables an investigation of the relations and interrelations of these units. We can only start to understand the structure of the relations and interrelations when something is known about the strength between these units. The interactions between groups can be described as being from very strong to very weak. Therefore the primary step in Factor analysis is the creation of a correlation matrix table which shows the strength of the relationship between each of the 15 variables (which are the 15 items in the questionnaire). This correlation table can be rearranged to show particular groupings of numbers. This process, called varimax rotation produces a second table called a factor matrix table, which assesses the variation in responses to all questions, due to a definite number of factors. The correlation coefficients in the factor matrix table show the strength of the correlation between the amount of variance in association to Qi due to the variation in Factor j as perceived by the respondent. This table is similar to the original correlation matrix. For example, if the sum of the correlations from all the factors for question 12 are multiple by the sum of the correlations from all the factors for question 9 then this figure should be similar to that given in the correlation co efficient matrix indicating the correlation between question 12 and 9.

Therefore, the process of factor analysis involves the grouping together of those questions that are highly correlated and similar to each other while excluding from the group those questions that are unalike.

The percentage of variation accounted for by each factor is obtained by squaring the co efficients in the varimax table . For example; by squaring the correlation co efficient (0.766) given for question 1 of factor 1 $(0.766)^2 = 0.58$, thus 58 % of the variation in question 1 is due to F1.

If the sums of squares of the factor matrix table entries over any row = 100% = 1, (e.g. Q1) it would mean that we had identified completely the factors determining peoples responses and their variation. Therefore it would be possible to conclude that people consistently and uniformly responded to questions on the bases of certain factors. The addition of the squares of numbers in row of the factor matrix equals the total amount of variance in answer to questions which can be associated with all factors. Table 7 presents the squares for each of the correlation co efficients presented in the factor matrix table and the total variance accounted for by all factors.

Table 7.

Squared correlation coefficients indicating the amount of variance in each question due to individual factors.

	FACTOR 1	FACTOR 2	FACTOR 3	TOTAL
1	.5466	.0936	.0984	.7386
2	.4751	.1347	.1453	.7551
3	.1828	.0504	.2802	.5134
4	.0951	.3234	.1479	.5663
5	.0943	.4670	.0746	.6359
6	.0364	.0993	.4776	.9117
7	.2009	.1074	.1031	.4114
8	.3200	.3981	.1632	.8813
9	.1519	.5081	.0176	.6776
10	.5573	.1385	.1132	.809
11	.6166	.0402	.0292	.686
12	.6588	.0543	.0141	.7272
13	.2067	.4567	.0084	.6781
14	.0058	.3103	.0536	.3697
15	.6144	.1412	.0439	.8004

The Relationship Between Questions and Factors.

There are two ways in which the association of questions with particular factors can be seen. The first way is by examining the amount of variation in the response to a question accounted for by each factor. For example,
question 12 has a large component of its variances as represented in it's correlation coefficient due to factor 1 (0.8116) because this number is large also in the calculation of variances, i.e when squared 0.6588. Small F_{j2} (0.2332) indicates that Factor 2 does

not influence the fluctuations in responses to question 12 greatly. Whereas the variation in responses to question 9 are due primarily to variations triggered by Factor 2 and not 1. As shown in table.

The second method is to plot F_{ij} against F_{i2} i.e. factors have table entries for any two factors at time for each question i. This is shown in graphs 1, 2 and 3. Because there are 3 factors the relationship between the factors is three dimensional, therefore three graphs are given. Each graph should be viewed representing the questions in three dimensions. As previously mentioned F_{ij}^2 corresponds to the squared factor table entries. The sum of all F_{ij}^2s is total variance in for a particular question which is triggered by these factors taken as a whole. This total variance corresponds to the distance on the graph in the diagonal from the point of origin. The distance between two points (corresponding to 2 questions) in the diagram is the square root of the correlation coefficient table entry (the original table) as predicted by factor analysis.

These graphs show that the axis representing factor one has questions 1,2,10,11,12 and 15, bunched close to it. Where questions 4,5,8,9,13 and 14, are bunched close to the axis representing factor two. The remaining factor, factor three has two questions associated with it these are question 3 and 6. As shown by the graph neither of these factors lie close to the axis representing factor three, as supported by the correlation coefficients. Neither are they very closely related to each other as shown by the distance between the two points on the graph and the correlations in the original table. Question 7, is not strongly related to any one particular factor. This indicates that

the points corresponding to questions on the graph bunch in these clusters. Each cluster tending to lie along the axis associated with that factor. Although a question may have a higher correlation with one factor other factors still influence it. Those factors that are least influenced by other factors help identify what the factor is. For example, question 14, which has a moderate correlation coefficient of 0.5571 with factor 2 is very weakly influenced by factors 1 and 3, as they account for only 6 % of the remaining variance. The suggestion that question 14 is more influenced by factor 2 than the other questions is supported from the graphs. Question 14 lies closest to the factor two axis in each situation and it's position is less influenced when compared with the remaining factors. Table 8 presents the questions in order. The first questions are those that have either high correlation coefficients with the factor, or are the least influenced by the other factors or both. The correlation coefficients (from the factor matrix) of each question with all factors are also presented in table 8.

Table 8

Factor 1

(12) How likely is this treatment to make permanent improvements in the child ?

(11) How effective is this treatment likely to be ?

(15) Overall what is your general reaction to this form of treatment ?

(10) How much do you like the procedures used in this treatment ?

(1) How acceptable do you find this treatment to be for a child's behaviour problem?

(2) How willing would you be to carry out the procedure yourself ?

	F1	F2	F3
01	.7394	.3120	.3137
02	.6893	.3671	.3811
10	.7465	.3721	.1327
11	.8753	.2005	.3365
12	.8116	.2332	.1708
15	.7839	.377	.2095

Factor 2.

(14) How much discomfort is the child likely to experience during the course of treatment ?

(13) To what extent are undesirable side effects likely to result

from this procedure ?

(9) To what extent do you think there might be risks in undergoing this type of treatment ?

(5) How cruel or unfair do you find this treatment ?

(4) If children had to be assigned to treatment without their consent, how bad would it be to give them this treeatment ?

(8) To what extent does this procedure treat the child humanely ?

	F2	F1	F3
04	.5687	.3081	.3845
05	.6838	.3071	.2732
08	.6309	.4000	.4040
09	.7128	.3898	.1327
13	.6758	.4546	.0916
14	.5571	.0759	.2316

Factor 3.

(6) Would it be acceptable to apply this procedure to institutionalised children, the mentally retarded, or other individuals who are not given an opportunity to chose treatment for themselves ?

(3) How suitable is this procedure for children who might have other behavioural problems than those desribed for this child ?

	F3	F2	F1
03	.5293	.2244	.4276
06	.6911	.3152	.4275

Question 7, is the only question that is associated with no factor.

(7) How consistent is this treatment with everyday notions about what treatment should be ?

	F1	F2	F3
07	.4483	.3277	.3212

The remaining table 9 shows the average mean score of the five procedures and each factor they are associated with. The importance of it will be mentioned in the discussion.

Table 9.

The average mean scores for each of the factors.

	F3	VF1	F2
SC	4.8	3.96	5.683
RC	4.65	4.23	6.45
OC	3.5	3.76	4.516
TO	3.85	3.76	3.883
PP	2.75	3.36	3.616

Table 5.

Showing the means, standard deviations, frequencies,and factors for individual questions in the TEI.

SOCIAL REPRIMANDSV

	X	S.D	FACTORS	FREQUENCY OF RESPONSES
12---	4.180	1.790	1	1-3 =30%, 4 =31%,(61%), 5-7 =30%
11---	4.219	1.668	1	1-3=29.8%,4=33.8%,(62.2%),5-7=37.7%
3---	4.430	1.685	3	1-3 =22.5% 4 =21.4%,(60%), 5-7 =40%
10---	4.995	1.719	1	
15---	5.025	1.795	1	
1---	5.129	2.333	1	
6---	5.154	1.067	3	1-3=16.4%,4=19.4%,(35.8%),5-6=30.8%,7=34.3%
14---	5.308	1.515	2	
13---	5.317	1.479	2	
7---	5.343	1.551	-	
2---	5.388	1.643	1	
9---	5.448	1.532	2	
4---	5.670	1.900	2	
8---	6.134	1.363	2	
5---	6.348	1.563	2	1-4 =6.5%, 5-6=31.3%,(37.8%) 7=62.2%

PHYSICAL PUNISHMENT

6----	2.478	1.688	3	1-3 =67.7%, 4=21.4%,(89.1%), 5-7 =10.0%
3----	2.905	1.652	3	1-3 =55.5%, 4=31%,(86.5%) 5-7 =13.5%

10---	3.100	1.921	1	
14---	3.299	1.493	2	
12---	3.300	1.928	1	1-3 =50%, 4=28%,(78%), 5-7=22%
2----	3.318	2.111	1	
8----	3.463	1.825	2	
15---	3.473	2.126	1	
9----	3.483	1.817	2	
4----	3.490	2.173	2	
1----	3.507	1.952	1	
13---	3.560	1.784	2	
11---	3.632	1.831	1	1-3 =38.8%, 4=34.8%(73.6%), 5-7 =26.5%
7----	4.050	1.907	-	
5----	4.308	2.031	2	1-3 =33.3%, 4=21.9%,(55.2%), 5-7 =44.3%

OVERCORRECTION

	$\bar{X}$	S.D	FACTORS	FREQUENCY OF RESPONSES
3----	3.485	1.646	3	1-3 = 45.5%, 4=34.3 (78.9%), 5-7 =20.2%
6----	3.520	1.899	3	1-3 = 44.5%, 4=28.5 (73%), 5-7=27%
10---	3.577	1.815	1	
12---	3.645	1.790	1	1-3 = 42%, 4=31.5% (73.5%), 5-7=36.5%
2----	3.806	1.982	1	
11---	3.825	1.673	1	1-3 =35.5%, 4=38.5%(74%), 5-7=26%
1----	3.910	1.792	1	
15---	3.955	1.901	1	
7----	4.124	1.700	-	

14---	4.134	____	2	
13---	4.265	1.720	2	
9----	4.385	4.385	2	
8----	4.448	1.760	2	
4----	4.578	1.902	2	
5----	5.164	1.865	2	1-3 =16.9%, 4=21.9%,(38.8%), 5-7 =61.2%

TIME OUT

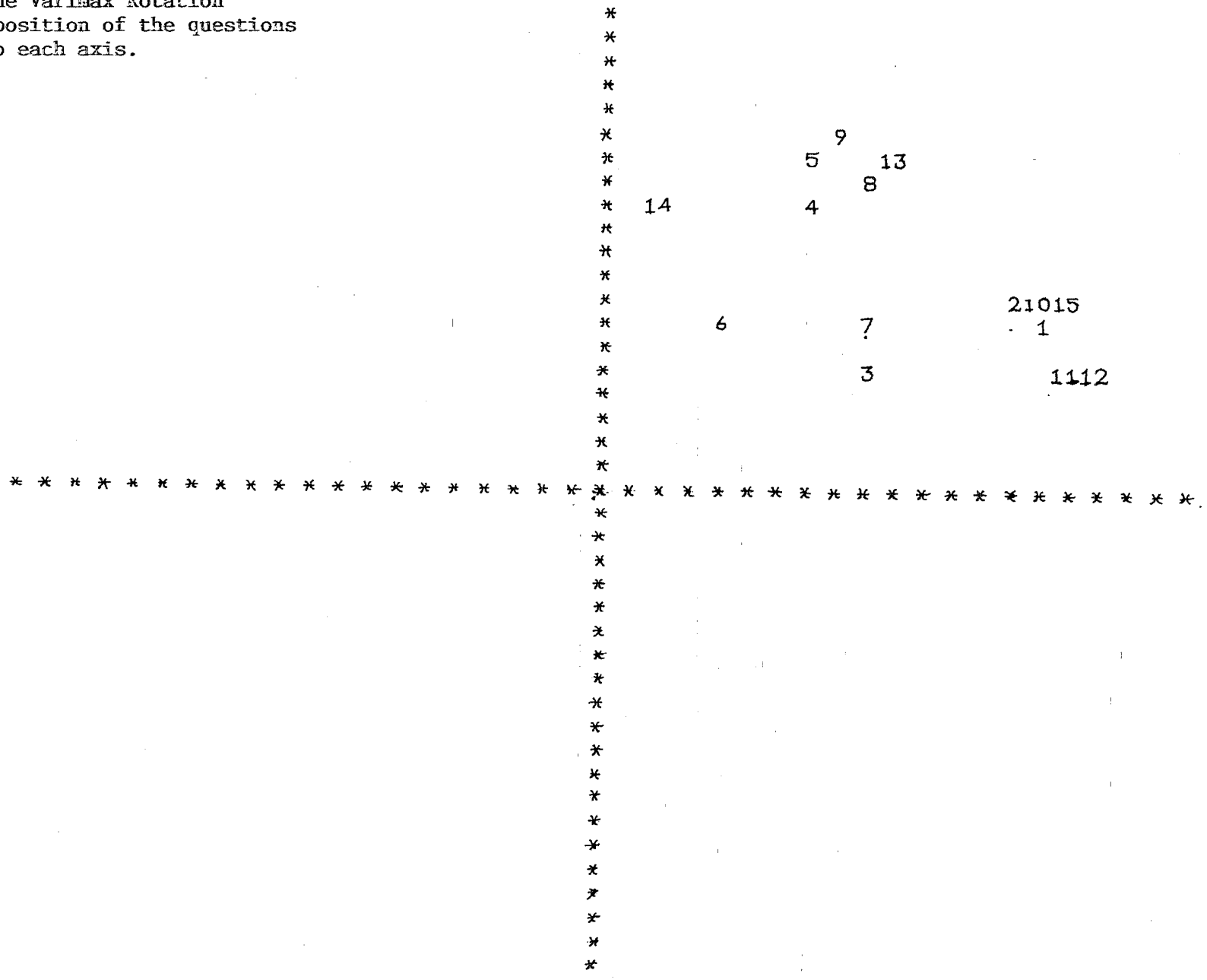
	X	S.D.	FACTORS	FREQUENCY OF RESPONSES
6----	3.657	2.143	3	1-3 =18.9%, 4=25.8%,(67.7%), 5-7=22.4%
3----	4.055	1.988	3	1-3 =34.7%, 4=21.9%,(50.2%), 5-7=70.0%
12---	4.290	1.831	1	1-3 =25.5%, 4=32.4%,(58%), 5-7=41%
10---	4.428	1.999	1	
14---	4.478	1.613	2	
11---	4.485	1.731	1	1-3 =8%, 4=33.5,(54.5%), 5-7=49.5%
13---	4.575	1.697	2	
15---	4.577	2.065	2	
7----	4.617	1.684	-	
9----	4.625	1.664	2	
4----	4.632	2.077	2	
2----	4.751	2.118	1	
1----	4.836	1.923	1	
8----	4.950	1.774	2	
5----	5.475	1.736	2	1-3 =13.5%, 4=16.5%,(30%),5-7=70%

RESPONSE COST

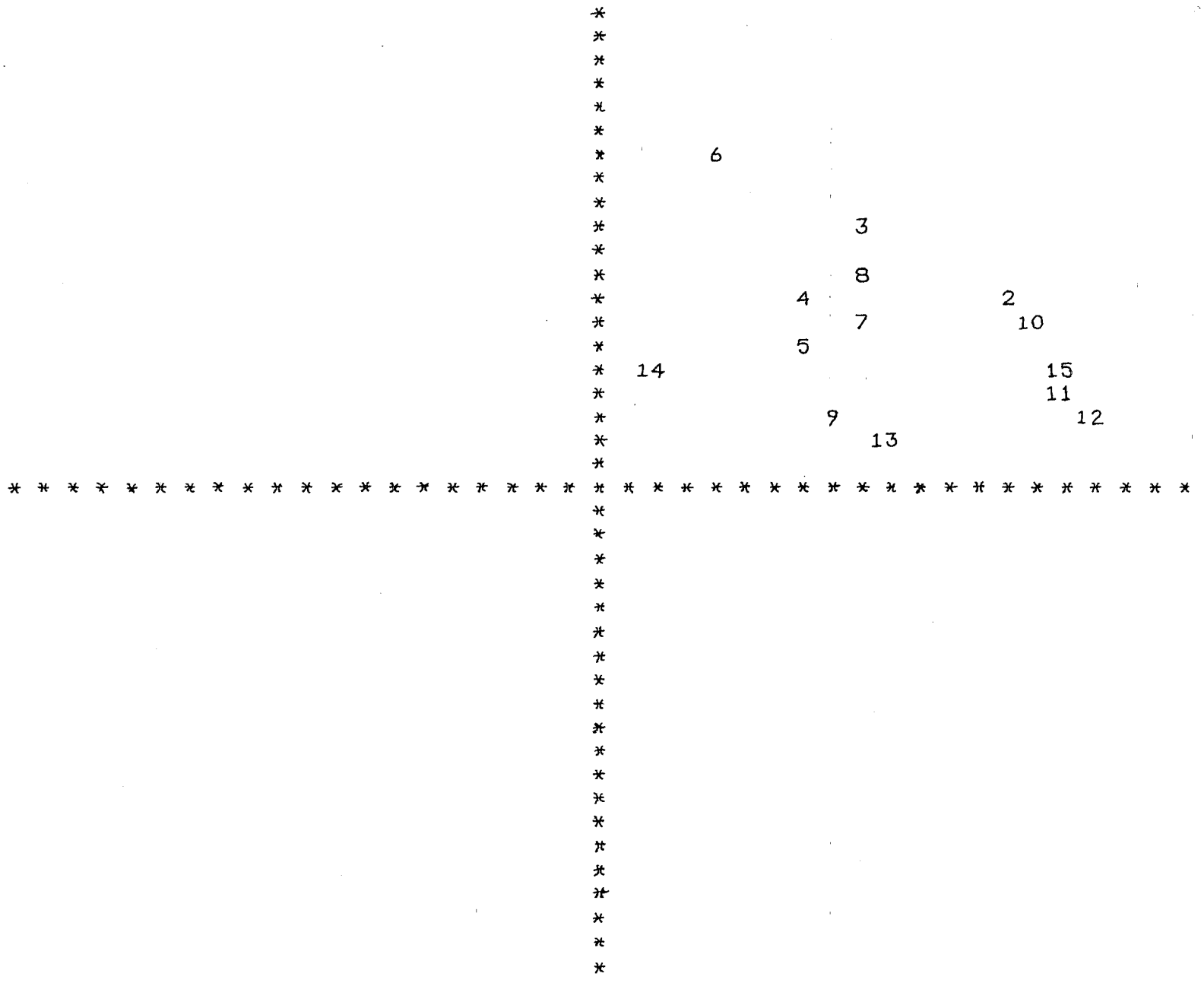
6----	4.510	2.068	3	1-3 =26%, 4=28%((54%), 5-7=45.5%
3----	4.769	1.687	3	1-3 =15.6%, 4=30.7%,(46.2%),5-7=53.8%
12---	4.890	1.809	1	1-3 =16.5% 4=23.5%.(40.0%), 5-7=70%
10---	4.990	1.780	1	
7----	4.930	1.602	-	
14---	5.375	1.548	2	
15---	5.313	1.751	2	
4----	5.065	2.074	2	
11---	5.045	1.045	1	1-3 =10.9%,4=28.9%,(39.8%), 5-7=60.1%
13---	5.070	1.485	2	
9----	5.219	1.579	2	
1----	5.244	1.713	1	
2----	5.338	1.759	1	
8----	6.100	1.356	2	
5----	6.440	1.087	2	1-3 =2.5%, 4=4.5%,(7%), 5-7=93%

GRAPH 1 HORIZONTAL FACTOR 1 VERTICAL FACTOR 2

Produced by the Varimax Rotation
and show the position of the questions
in relation to each axis.



GRAPH 2


HORIZONTAL FACTOR 1
VERTICAL FACTOR 3
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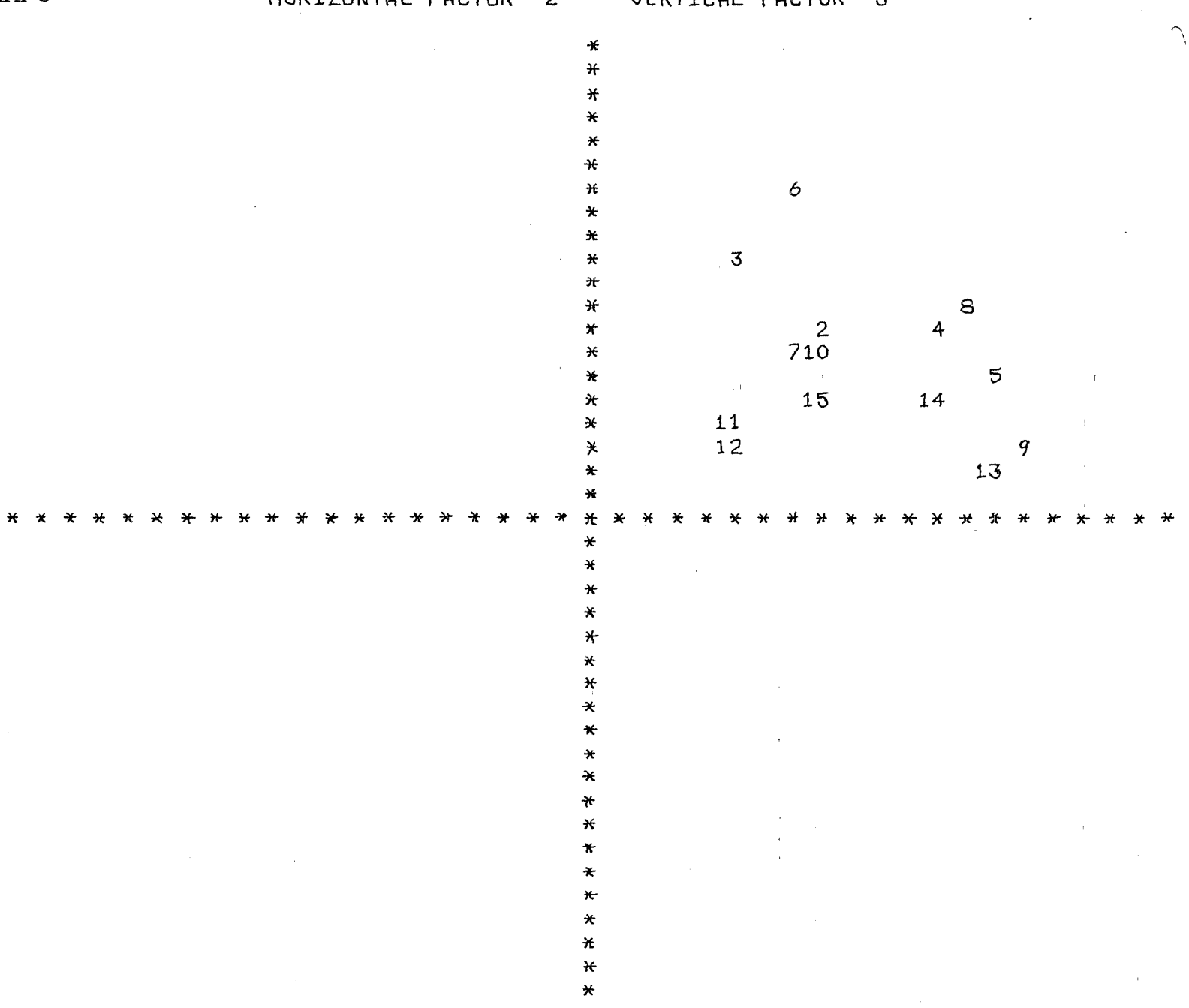
GRAPH 3


HORIZONTAL FACTOR 2
VERTICAL FACTOR 3
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13

FIGURE 2 - MEAN SCORES GIVEN TO INDIVIDUAL QUESTIONS FOR SOCIAL REPRIMANDS AND RESPONSE COST GROUPED ACCORDING TO THE FACTORS THEY ARE ASSOCIATED WITH

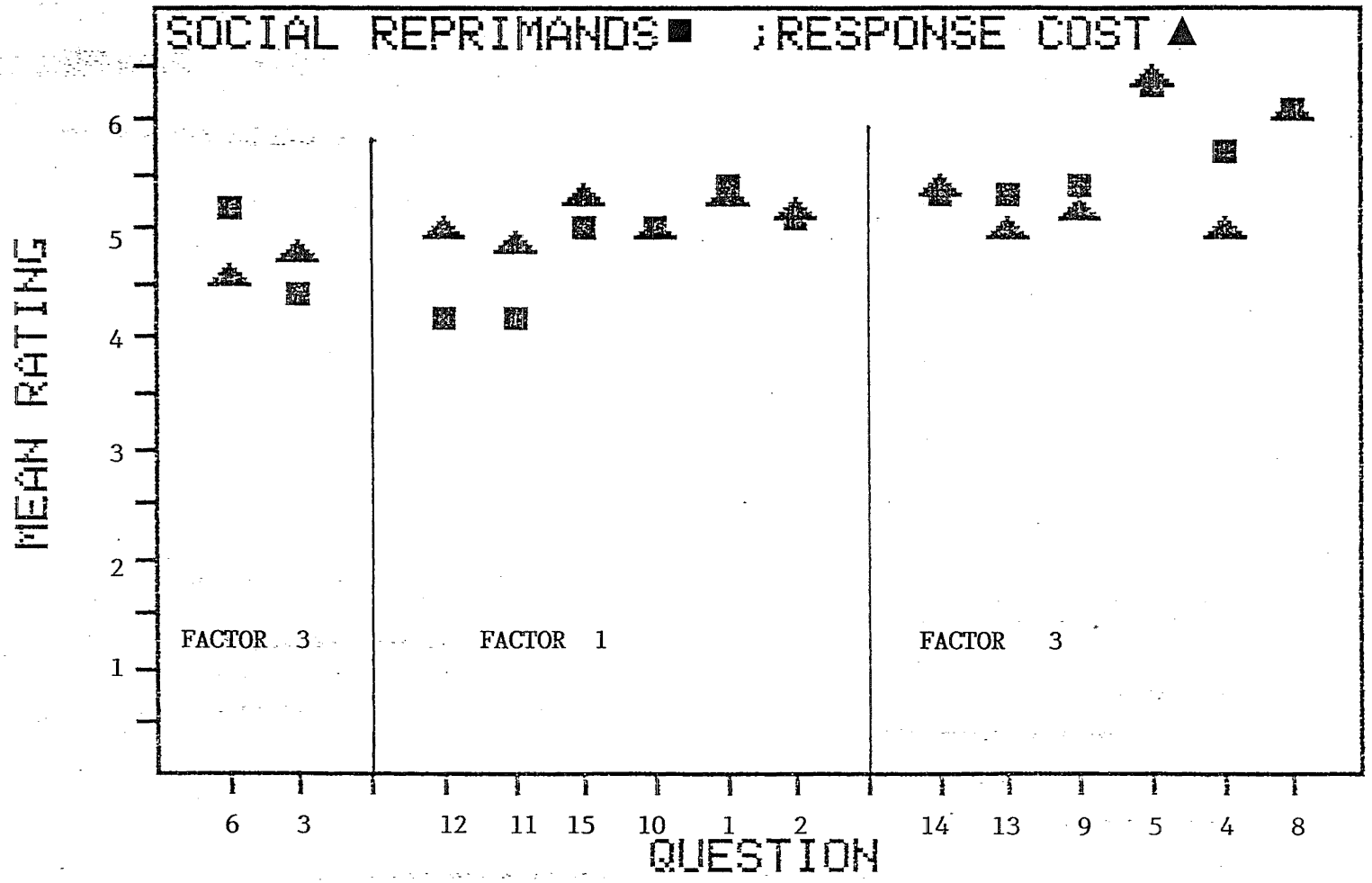
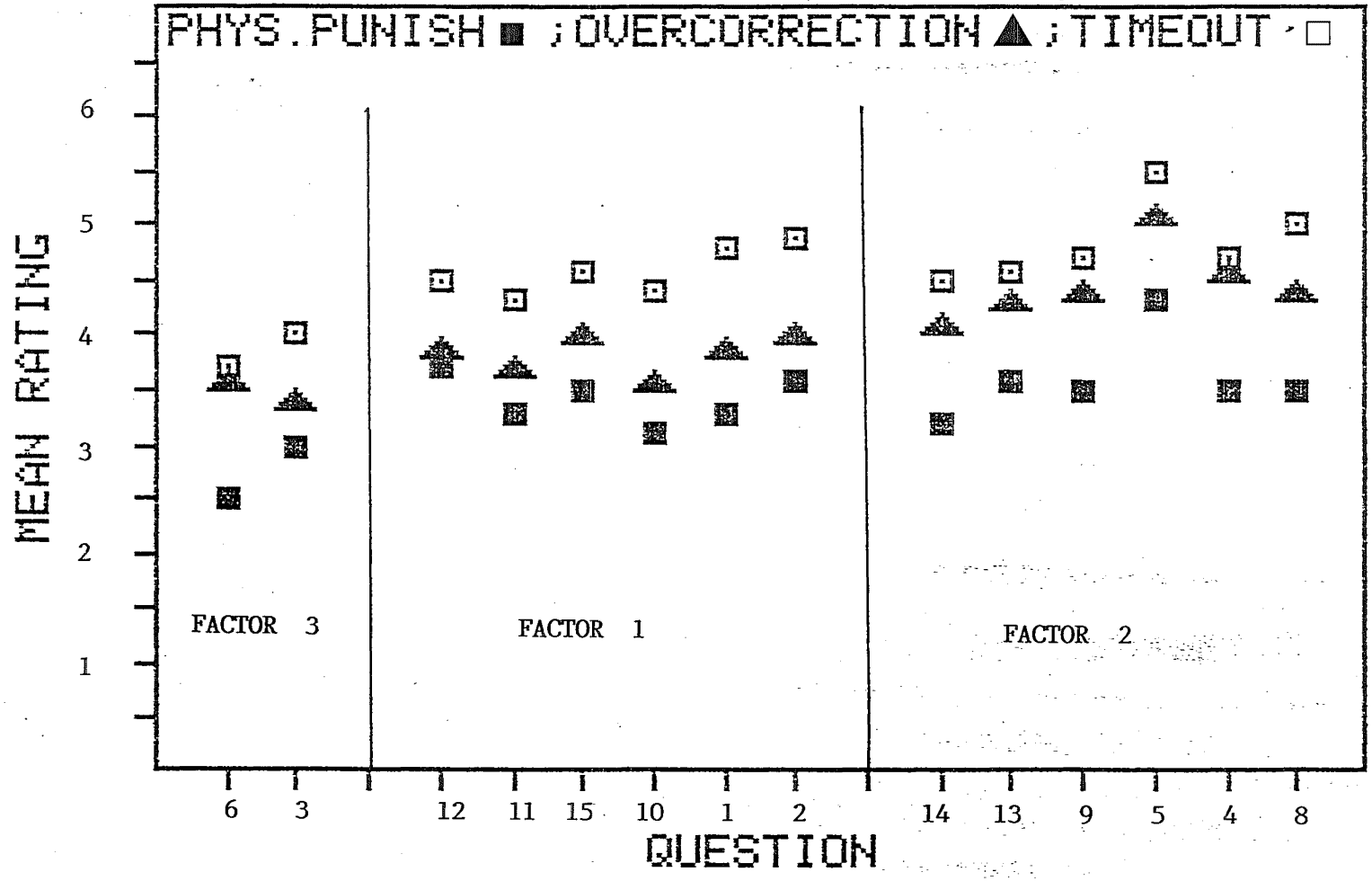


FIGURE 3 - MEAN SCORES GIVEN TO INDIVIDUAL QUESTIONS FOR TIME OUT, OVER CORRECTION AND PHYSICAL PUNISHMENT, ACCORDING TO THE FACTORS THEY ARE ASSOCIATED WITH.



5.0 DISCUSSION

The Comparison with previous findings using the TEI.

The results of the analysis of variance of showed that the acceptability of all treatment procedures was readily distinguishable. This pattern consistent with other research.

Response cost and social reprimands both had the highest acceptability scores of 78 showing they were considered very acceptable procedures both at home and school. The only other rating given to response cost was 84 (Frentz and Kelley, 1986) is lower than this. However the difference is small. Social reprimands has been a procedure which has not been rated, by other researchers therefore no comparison can be drawn from other studies.

The acceptability rating given to time out was 68, showing that it was viewed as slightly higher than a moderately acceptable procedure. In comparison with other studies this rating is indentical to the rating of 67 in Frentz and Kelley (1986), and slightly higher than the ratings given by students, as described in section 2.4. Because the acceptability of timeout is so variable it is difficult to make comparisons between the scores presented in different studies.

Overcorrection was rated as having an acceptability of 61,

indicating that the majority of people found it to be a moderately acceptable procedure. The acceptability rating given in this study is considerable lower than previous studies. This is especially evident where comparing the means of 72, 73 and 76 reported in (Kazdin, 1981; Kazdin etal, 1981). It is also lower than the mean of 67 (Singh and Katz 1985).

Comparisons between the relative acceptabilities of time out and positive practice in section 2.4 showed that positive practice had consistently been rated as more acceptable than time out. Whereas this study shows that time out was rated as more acceptable than overcorrection. One possible explanation of this that it is due to differences in the groups rating the procedures. No other studies have used members of the general public to rate the acceptability of overcorrection. Secondly, as the interaction shows, the acceptability of overcorrection at home is 68 for females and 67.4 for males, which shows that overcorrection is as acceptable as time out when it is used in the home environment. Thus the lower overall score for overcorrection is partially due to the differences in the setting in which the treatment procedures are applied.

The overall acceptability score given to Physical Punishment (51.5) shows that physical punishment is less than moderately acceptable. This is consistent with the findings of Frentz and Kelley (1986), where spanking was given the mean rating of 44.

No studies that have investigated the effect of the setting on the acceptability of punishment procedures have found it to be a significant variable. In this study the two least preferred

treatments, overcorrection and physical punishms/rs recommended more severe punishments for males than for females. Goldstein, Arkell, Ashcroft, Hurley and Lilley (1985) found that the choice of punishment may vary as a function of the situation.

The Relationship Between the Factors and the Acceptability of Treatment procedures.

Greater insight into the variations in the acceptability of the treatment techniques is obtained through the results of the factor analysis and the mean ratings given to individual questions in the TEI.

Factor 1.

Factor 1 is most transparent in the responses to question's 11 and 12 (since these lie closest to the origin in the factor 2, factor 3 plot) and the factor matrix table gives a proportionally higher component to their variances than the other factors. Questions 11 and 12, as distinct from the other questions associated with factor 1, raise the matter of long term effectiveness of the treatment. The remaining questions ask more for subjective value judgements and are less likely to trigger a predictable response. That is, questions such as, "how much do you like these procedures?" (question 10), "how acceptable do you find this procedure?" (question 1) and "how willing would you be to use this procedure?" (question 2) are subjective and less specific, than how effective do you think these procedures will be.

Factor 2.

Question 14, as previously mentioned, gives the clearest indication in identifying factor 2. The question asks the respondent to rate how much discomfort the child would experience during the course of the treatment, suggesting that factor 2 is associated with the physical aspect of the treatment. The remaining questions associated with factor 2 support this and indicate humanitarian aspects of the treatments, such as the likelihood risks (question 9), side effects (question 13) and fairness (question 5).

Factor 3.

Question 6 is strongly related to factor 3, and intermediately to factor 1 and weakly to factor 2. Question 3 is less strongly associated with Factor 3 and weakly to factor 1 and intermediately to factor 2. Factor 3 may be identified as a common theme touched on by questions 3 and 6. In these questions the behavioural environment is specified to be that of children with disruptive behaviours. The factor 3 projections in the diagram (Figure....) are uniformly higher for question 6 than for question 3. This confirms the identification since question 6 is much more specific about the nature of the behavioural problem and the setting. The principal reason for the association of questions 3 and 6 in factor analysis is the tendency of respondents to dislike certain treatments for children with disruptive behaviour problems in particular settings (i.e. factor 3). These questions score consistently less in the mean responses for all the punishments except social reprimands. This might further be attributed to the reluctance to expose children in institutional care or otherwise under the supervision of third parties to severe or physical

treatment procedures. This hypothesis is further confirmed with the findings of the Setting -by- Treatment interaction. Overcorrection and physical punishment (the two less acceptable procedures) are less acceptable in settings where children are under the supervision of third parties, i.e. at school.

The factor matrix table shows that the correlation coefficients associated with factor 1 are strong. All except question 2 are greater than 0.7. The correlation coefficents of questions associated with factor 2 are less strongly associated than those of factor 1. Only one question has a correlation of 0.7, the remaining questions have correlations ranging from 0.5 to 0.6, as do those associated with factor 3. Therefore factor 1 which concerns the effectiveness of the procedures appears to be the most dominant factor. This assumption of "effectiveness" as the intrinsic criteria of factor 1 is supported by the relatively strong variance contributed to factor 1 from question 13, which actively associates with factor 2. Question 13 is concerned with the undesirability of side effects which not only has dominant humanitarian overtones relevant to factor 2 (humanitarianism, discomfort or physical unpleasantness) but also overtones of long term effectiveness (factor 1). Similarly question 8 which is associated with the humanity of the procedure, is also influenced by its effectiveness. Questions such as "how acceptable do you find this procedure" (questions 1) and "how willing would you be to use this procedures" (question 2) which are associated predominantly with factor 1 are also influenced by factor 2. This interaction between the factors is present for all factors. For example, although respondents are mainly concerned with the effectiveness of the procedures when rating questions such as "how

much do you like the procedure" and "what is you overall reaction to this procedure" they are also influenced (but less strongly) by factors 2 and 3. As explained in section 3.1 the varimax rotation groups together those questions which associate most strongly with a particular factor.

As a result of this factor analysis we can suggest that when respondents are asked to rate a procedure their principal concern is how effective they think the treatment is. If the treatment is perceived by the respondent to be effective then they find it more acceptable and therefore are more willing to use it. Their second concern is the amount of physical discomfort, the fairness of the procedure and so forth. The third factor that influences their decisions is who is administering the procedure, to what people and in which environment.

From this finding it appears that the factors that influence respondents when evaluating a procedure are similar to those that therapists make, that is the predominant concern of a therapist is choosing a procedure is effective. As mentioned in section 1.2 many therapists are faced with the difficulty of the most effective procedures being unacceptable. The implication of this is that the general public may appreciate the problem that therapists face and through adequate education and empirical data on the effectiveness of the treatment procedures the acceptability of certain punishment procedures may be increased. The effect that education has on increasing the acceptability of various treatment procedures has been demonstrated (Singh and Katz, 1985).

Factor analysis and the Relationship to the Procedures.

The aim of the factor analysis was to increase our understanding not only of the factors that influence respondents choices but also how these factors influenced the acceptability of the individual treatment procedures which the respondents evaluated.

The questions and the mean rating associated with each of the three factors were grouped together and the average mean score of each of the factors was calculated. This is presented in Table 9. The the most acceptable aspects of social reprimands and response cost are that they cause minimal physical discomfort and are suitable for children with other disruptive behaviours or who are institutionalised. The mean scores given to these this facor suggests that social reprimands would be more suitable than response cost. The least acceptable aspect of these procedures is their perceived ineffectiveness response cost is rated slightly higher that moderately effective while social reprimands is less than moderately effective. Futher support for this comes from comparison of the means for response cost and social reprimands. Like social reprimands time out overcorrection and physical punishment have their highest means associated with factor 2. however the difference between the the average mean scores suggests that the difference is slight. The least acceptable feature of physical punishment relates to it's inappropriateness for other behavioural problems and institutionalised children. As previously explained the most dominant factor relating to the acceptablility of the treatment procedure is it effectiveness. These results indicate that the least acceptable aspect of s/rs have been concerned with how the aceptability of a procedure is affected with gross changes in certain parameters. For example many explanations

take the form "respondents rated A, B and C as significantly more acceptable than D and E", or "when X occurred there was a significant decrease (or increase) in A,B,C,D and E. In most studies X refers to different groups of respondents and additional information on the effectiveness, adverse sie effects of the procedures and so on. These results have been interpreted a showing that changes in X cause changes in A,B,C, and so on. Unfortunately most of these errors are causation correlation type errors. It is assumed that the negative aspect of a treatment is it's harshness. However this study showed that there an alternative explanation of treatments tht have lower scores is that respondents give low rating to those questions relating to factor 1. Thus while harsh treatments are rated as less acceptable with aspects concernings physical discomfort questions concerning effectiveness have a more dominant role.

The frequency of responses to individual questions suggest that for the most acceptable procedures, social reprimands and response cost, the majority of people are certain about how they feel about the procedures. For example, the frequency of responses to question 1 in the case of social reprimands shows that most people would be willing to use it. This contrasts with the less acceptable procedures where particular questions produce a bipolar responses suggesting that people are divided in their attitude toward them. This is most evident with physical punishment. Responses to question 15 show that 47% of the responses range from those who feel ambivalent to those who feel the procedure is highly positive yet 27% rate their overall reaction to the treatment as being very negative. This pattern of responding is also seen in the frequency of responses to questions 4 and 7. Although the majority of

respondents find physical punishment to be an unacceptable procedure, a sizable proportion of respondents find it an acceptable procedure as indicated by the frequency of responds to questions 2 and 15. However this statement must be qualified since there are particular questions (3 and 6) where over 89-93% of the respondents find this procedure to be unacceptable for use with mentally retarded institutionalized and children with other behaviour problems.

Most researchers have been concerned with describing how the acceptability of procedures alters as a function of changes in gross parameters. For example many explanations take the form of: the respondents rated A,B and C as highly acceptable and significantly more acceptable than D and E. The cause of changes in acceptability have centered around different groups of respondents finding certain procedures more or less acceptable than other groups, the adverse side effects caused by the procedure and so on. Unfortunately the majority of these "causal" explanations are example of correlation - causation type errors, that is, a change in A was produced because of a change in B. A general theme that underlines most explanations is specifically mentioned in Frentz and Kelley (1986) "less punitive treatments are more acceptable than harsher forms of treatments". As previously explained, the perceived effectiveness of a procedure has great influence on the acceptability of how acceptable respondents rate the procedure. This suggests that punishments that are 'harsher' such as; timeout, over correction and physical punishment, score lowest on questions related to the acceptability of different situations (Factor 3) and the perceived effect of the procedure. The means that score highest are related to physical discomfort and

humanitarian aspects.

Limitations.

The limitations of this study fall into two categories, those associated mainly with this study and those that are relevant to all studies using the TEI. The first section will examine the limitations relevant to this study.Limitation of this study

(i) The Problem of Sample Bias.

As stated in section one of the aims of this study was to sample a less biased group of respondents than were selected in previous studies. Hence members of the general public were randomly chosen. Comparisons between the characteristic of the respondents in this sample with those of the general population in N.Z., are not identical. This sample is different from the N.Z. population because: (a) there were more men than women, (b) more aged less than 25 years and more in the age group between 26-45 and under represented those in the over 50 years. (c) the educational level was higher.

The problem of gaining a representative sample of a population is faced by every researcher. Precautions were taken as described in section 3 to avoid as much sampling bias as possible. However a factor that influenced the sampling in all surveys is ultimately one can only get information from those who agree to participate.

No data was gathered on either number or sex of the respondents who were approached but declined to do the questionnaire. Had this information been collected, it may have shown that equal numbers of men and women and the ages appproached were in the same proportions as those in the general population. A possible reason for lack of over 50 age group being sampled is they often commented that it would be better if the opinions of younger membbers of the community were sought. An advantage of having an age group that is biased in this direction is that these people or their children are more likely to be potential consumers of the treatments. In some cases men who said they would complete the questionnaire had obviously asked their wives (partners) to.

The bias of this sample is toward higher educated people is unfortunate. Is the problem one where more well educated agree to participate and less well educated people decline or fill out the questionnaire incorrectly?

(ii) Unrealistic conditions

A second limitation of this study and other studies using the TEI is that the condition in which the research is conducted are unrealistic. For example; people may be rating what they ideally "feel" about the procedure. For instance if a child was hitting another child would their only or first form of correction be a reprimand. A second way in which the conditions are unrealistic respondents are provided with a limited amount of information.

(iii) Unaccounted for Variance

Through analysis of variance we are given some indication as to how much or how little variance in the responses to individual questions is accounted for by the factors. This total variance is presented in Table 8. According to this data, questions 15, 8 and 10 have 80% or more of their variance accounted for. Questions 15 and 9 have between 55% and 61% of their variance accounted for by factor 1 the remaining variance is due to factors 3 and 2. Question 8 has 39% of its variance explained by factor 2 and 32% and 16% by factor 1 and factor 3 respectively. Questions 3, 7 and 14 have 50% or less of their variance accounted for by the 3 factors. The finding that question 7 has only 41% of variance explained by the 3 factors and is not actively associated with any particular factor is a predictable finding. As it is the only question that is concerned with whether the treatment is consistent with conventional notions about what a treatment should be. The remaining questions (3 and 14) are more difficult to explain. Question 14 is most strongly associated with factor 2 as the remaining variance of 5% is accounted for by factor 3.

These variances could be attributed to the limitations in the structure of the questionnaire. A reoccurring problem with this questionnaire is the confusion caused with presenting respondent with a specific case description, 5 different treatment procedures and 15 general questions. Anecdotal comments in the form of either remarks on the questionnaire or conversations with respondents indicate that respondent found great difficulty in combining the information presented in the case description with the questions

asked in the TEI. By presenting specific case descriptions to the respondents and then asking them to answer general questions regarding the acceptability of the procedure. Many respondents felt they were being asked to choose the best or most appropriate punishment for the described child. Consequently they desired more information on the child's background eg. had they suffered traumatic events in their childhood and the relationship with parents and/or teachers. In contrast the aim of the TEI is to distinguish the acceptability of various procedures. A possible solution to the problem is to include a more general case description or state more overtly the aims of the study, (that is to distinguish the acceptability of different treatment techniques used to correct childrens disruptive behaviour).

The results of the factor analysis suggest that respondents are concerned with who is administering the procedures and the situation in which they are being administered. Therefore reassuring information on the person administering the procedure should be given.

The second possible cause of unaccounted for variance is that all the punishments are behaviourally orientated. Wolfgang and Brundenell (1983) suggest that there are different schools of thought as to what discipline procedures are best. They suggest three basic models: first relationship- listening (which involves talking to the child about the problem, who owns the problem). Second, Transactional analysis: - relating to the ego status of the child from one of our three ego states. Thirdly behaviour modification orientation, where the child moves towards positive reinforcements and disruptive behaviour is decreased through

punishment.

Unaccounted for variance suggests modifications to the questions are needed.

As previously mentioned, a decision needs to be made as to whether a general or a specific questionnaire needs to be designed. That is, if a specific case description such as the one being used is continued then the questions need to be more specific, they should relate to the case description and be restricted in a way based on the information from the factor analysis. and therefore general or specific information. To date most of the research has been concerned with trying to find specific information on the acceptability through general questions. For example: Kazdin, Frentz state more restrictive alternatives such as time out and medication are less acceptable that treatment like differential reinforcement. While this assumption was challenged in the introduction, it illustrated the problem that correlations such as more restrictive alternatives are being less acceptable is caused because they are more restrictive to the child. To some extent this is speculative. The findings of this study suggested that effectiveness and the suitability of the procedure for institutional situation - as illustrated by Factor 1 are major contributing factors to the low scores for more restrictive procedure, rather than questions regarding the physical discomfort and humanitarism aspects of the procedure. Comparison of factor - different interpretation to while possibly true support does not come form correlation - indicates that this problem needs to be specifically addressed.

(iv) Limitations of All Studies Using the TEI.

The use of total scores is based on several the assumptions. Several of these are not met in this study (or any study using the TEI).

The first assumption is that all questions are of equal weight. An obvious exception to this is question 7. Question 7 asks if the procedure is in line with common sense, or everyday notions. This does not seem as important as "how willing would you be to use this procedure" or "how effective do you think this procedure is". The second assumption relates to the first, that is that the questions are not ambiguous. Three questions were commented on by several respondents. Some respondents did not understand what is meant by question 4 "would you use the procedure without the childs consent" i.e. were they to present the child with the opportunity to refuse or accept the procedure. On question 6, several people felt that the two groups specifically mentioned, the institutionalised and the mentally retarded differed considerably. A procedure that was acceptable for one group may not have been acceptable for another. There was also some confusion as to whose "common sense" was being referred to that of people in general or their own. The third assumption is that a high score presumes positive feelings and a low score negative. This does not necessarily hold for some questions. Again this is illustrated by question 7, where being rated as not consistent with everyday notions not necessary a negative aspect. For physical punishment question 7 had the second highest mean score but it was rated as an unacceptable procedure. Another assumption concerns the type of analysis that is done. One of the assumptions of analysis of variances is that the numbers are

representative of a linear (interval scale); that is to say they are as precise and as well defined as are degrees on a thermometer. This assumption is not valid in this study. We have no way of knowing if the distance between 1 and 2 in acceptability of willingness is equivalent to the distance between any other two numbers - (say 6 to 7. The use of interval data on ordinal statistics is a common practice, all studies using the TEI have analysed their results with interval statistics (such as analysis of variance). The critical question is how great the risks of faulty conclusions in analysing ordinal variables with interval statistics. Weisbery and Bowen (1977) state some authorities claim that too much has been made of the distinction between interval and ordinal measurement and there is not much risk in this situation. They also add that this point is controversial and is a topic of lively discussion.

These assumptions are important to remember when using only the total score to indicate the acceptability of procedures, as it does not represent a "pure" estimate of acceptability.

CONCLUSION.

In section 2.0 literature on acceptability of procedures used to correct childrens disruptive behaviour, was reviewed along several criteria. These were: is there a general level of acceptability among treatment procedures? How can the acceptability of procedures be enhanced? And thirdly, is the present form of analysis improving the understanding of factors that effect the acceptability of different treatment procedures.

If the results of the study are examined along these same criteria it appears there is additional confusion as to which procedures are more acceptable. In previous overcorrection has been significantly more acceptable than time out. This suggests that to hope for a situation where we can have the empirical evidence to suggests that procedure "X" is more acceptable than procedure "Y" under certain conditions with specific groups of respondents is o form of utopia with regard to the acceptability of alternative treatments for childrens disruptive behaviour. Given this we are faced with two alternatives. We can decided either to use the TEI or to construct some other method of examining the acceptability of alternative treatments for children. If we choose the first alternative to continue using the TEI we must analyse the results by examining responses to individual questions using the three factors and interpret. The acceptability scores that are given should be interpreted in a broad sense. That is the results can only be used to indicate those procedures that are most acceptable and those that are highly unacceptable. The second alternative is to administer the TEI to specific individual who may faced with having to choose between several alternative treatments either for themselves or their children. In doing this one could tell what aspects of the treatment the individual felt were unacceptable.

If we choose the second alternative i.e. not to use the TEI, then construction of another assessment device should be based along the dimensions suggested by the factors analysis.

REFERENCES.

Azrin, N.H., & Wesolowski, M.D., (1975). Eliminating habitual vomiting in a retarded adult by positive practice and self correction. Journal of Behavior Therapy and Experimental Psychiartry, 6, 145-148.

Bailey, S.L. (1983). Extraneous Aversives. In S. Axelrod and J. Apsche (Eds.), The Effects punishment on Human Behaviour. (Pp133-214). New York: Academic Press, Inc.

Bornstein, P.H. Rychtarik,R. (1983). Consumer Satisfaction in Adult Behaviour Therapy, Procedures, Problems and Future Perspectives. Behaviour Therapy, 14, 191-208.

Boverman, I.K., Vogel. S.R., Boverman, D.M., Clarkson F.E., & Rosenkrantz, P.S. (1972). Sex role sterotypes: A current appraisal. Journal of Social Issues, 28, 59-78

Brantner, J.P. & Doherty, M.A. (1983). A Review of Timeout: A Conceptual and Methodical Analysis. In S. Axelrod and J. Apsche, (Eds), The Effects of Punishment on Human Behaviour, 87-125, New York: Academic Press,Inc.

Budd, K.S. Baer, D.M. (1976). Behaviour Modification and the Law: Implication of Recent Judicial Decisions.Journal of Psychiatry and Law, 4, 171-260.

Cohen, C. (1981). Person Categories and Social Perceptions: Testing some Boundaries of the Processing Effects of Prior Knowledge. Journal of Personality and Social Psychology, 40, 441-452.

Davidson, L. (1981). Pressure and Pretense: Living with Gender Sterotypes. Sex Roles, 7, 331-346.

Dixon, W.J., Brown, M.D., Engelman, L., Frane, J.W., Hill M.A., Jennench R.I., & Tupovek J.D. (1981). BMDP Statistical Software. University of California, Press Berkelely.

Doleys, D.M., Wells, K.C., Hobbs, S.A., Roberts, M.W., & Cartelli, L.M. (1976). The Effects of Social Punishment on noncompliance: A comparison with timeout and positive practice. Journal of Applied Behavior Analysis, 9, 471-482.

Dorsey, M.F., Iwata, B.A., Ong, P., & McSween, T.E. (1980). Treatment of Self-injurious Behaviour Using a Water Mist: Initial Response Suppression and Generalization. Journal of Applied Behaviour Anyalsis, 13, 343-353.

Forehand, R., Roberts, M.W., Doleys, D.M., Hobbs, S.A., & Resick, P.A. (1980). An examination of disciplinary procedures with children. Journal of Experimental Child Psychology, 21, 109-120.

Foxx, R. M. (1976). The Use of Overcorrection to Eliminate the Public Disrobing (stripping) of Retarded Women. Behaviour

Research and Therapy, 14, 53-61.

Foxx, R.M. & Bechtel, D.R. (1983). Overcorrection: A Review and Analysis. In S. Axelrod and J. Apsche (Eds.), The Effects of Punishment on Human Behaviour . (Pp. 133-214). New York: Academic Press, Inc.

Frentz, C. & Kelly. M. (1986). Parents Acceptance of Reductive Treatment Methods: The Influences of Problem Severity and Perception of Child Behaviour. Behaviour Therapy, 17, 75-81.86.

Garfield, S.L.(1983). Some Comments on Consumer Satisfaction. Behaviour Therapy, 14, 237-24

Goldstein, H., Arkell, C., Ashcroft, S.C., Hurley, O., & Lilly, S (1975). Schools. In N. Hobbs (Eds.), Issues in the Classification of Children, 2, San Francisco: Jossey-Bass.

Iwata, B.A., & Bailey, J.S. (1974). Reward Versus Cost Token Systems: An Analysis of the Effects on Students and Teachers. Journal of Applied Behavior Analysis, 5, 567-576.

Johnston, J.M. (1972) Punishment of Human Behaviour. American Psychologist,27, 1033-1053.

Kazdin, A.E. (1980a). Acceptability of Alternative Treatments for

Deviant Child Behaviour. Journal of Applied Behavior Therapy, 11, 329-344.

Kazdin, A.E. (1980b). Acceptability of Timeout from Reinforcement Procedures for Disruptive Child Behavior. Behavior Therapy, 11 329-344.

Kazdin, A.E. (1984). Acceptability of Aversive Procedures and Medication as Treatment Alternatives for Deviant Child Behavior. Journal of Abnormal Psychology, 12 (2) 289-302.

Kazdin,A.E. French,N.H. &Sherick,R.B. (1981) .Acceptability of Alternative Treatments for Children: Evaluations byInpatient Children, ParentsandStaff.JournalofConsultingandClinical Psychology,49, 900-907.

Kazdin, A.E. (1981). Acceptability of Child Treatment Techniques: Influence of Treatment Efficacy and Adverse Side Effects. Behavior Therapy, 12, 493-506.

Kiesler, C. (1983) Social Psychological Issues in Studying Consumer Satisfaction with Behavior Therapy. Behaviour Therapy, 14, 226-236.

Lebow, J. (1982). Consumer Satisfaction With Mental Health Treatment. Psychological Bullentin, 91, 244-259.

McMahon, R.J. & Forehand, R.L. (1983). Consumer Satisfaction in

Behavioral Treatments of Children Types, Issues and Recommendations. Behavior Therapy, 14, 209-225.

Maurer, A. (1974) Corporal Punishment.American Psychologist, 29, 614-626.

Morales v Turman, (1974). 383 F. Supp. 58 (ED Tea 1974).

New Zealand Official Year Book. (1986-87). 91st Annual Edition, Department of Statistics, Wellington. Published by; Information, Services Division of Department of Statistics.

Nie, N.H., Hadlai Hull. C., Jenkins, J.G., Steinbrenner, K. & Brent, B. (1975). Statistical Package For the Social Science. Second Edition, McGraw - Hill Book Company.

Norton, G.E., Austen,S., Allen, G.E., & Hilton,J. (1983). Acceptability of Timeout from Reinforcement Procedures for Disruptive Child Behaviour: A further analysis. Child & Family Behavior Therapy, 5, 31-41.

Pazulinec, R., Meyerrose, I. & Sajwaj, T. (1983). Punishment via Response-Cost. In S. Axelrod and J. Apsche, (Eds.), The Effects of Punishment on Human Behavior (Pp 71-84). New York: Academic Press, Inc.

Romanczyk, R.G., Colletti, G., & Plotkin R. (1980). Self-Injurious Behavior: Issues of Behavior Analysis, Generalization and the Right to Treatment. Child Behavior Therapy, 2, 37-53.

Sokal, R.R. & Rohlf F.J. (1981). Biometry; The Principles and Practice of Statistic's in Biological Research. Freeman W.H. and Company. Second Edition, San Francisco.

Singh, N.N. & Katz R.C. (1985). On the Modification of Acceptability Ratings for Alternative Child Treatments. Behavior Modification, 9 (3), 375-386.

Thomas, J.D., Presland, I.E., Grant, M.D., & Glynn, T.L., (1968). Natural Rates of Teacher Approval and Disapproval in Grade-7 Classrooms. Journal of Applied Behavior Analysis, 1, 35-45.

Turkat, I.D. & Forehand R. (1980). Crictical Issuses in Behavior Therapy. Behavior Therapy.

Van Houten, R. (1982). Disruptive Behaviour. Journal of Applied Behavior Analysis, 65-83.

Van Houten, R. (1979). Social Validation: The Evolution of Standards of Competency for Target Behaviours. Journal of Applied Behavior Analysis, 12, 581-591.

Van Houten, R. & Doleys, D.M. (1983). Are Social Reprimands Effective? In S. Axelrod and J. Apsche, (Eds.), The Effects of Punishment on Human Behavior (Pp 71-84). New York:Academic Press, Inc.

Van Houten, R., Nau, P.A., MacKenzie-Keating, S., Sameoto, D., & Colevecchia, B. (1982) An analysis of some variables influencing the effectivceness of reprimands. Journal of Applied Behavior Analysis, 15, 65-83.

Wicker, T. A Bad Idea Exists. New York Times, February 8, 1974, 31.

Witt, J.C. & Martens, B.K. (1983). Assessing the Acceptability of Behavioral Interventions Used in the Classrooms. Psychology in Schools, 20.

Witt, J.C., & Martens, B.K. & Elliott, (1984). Factors Affecting Teachers' Judgments of the Acceptability of Behaviour Interventions: Time Involvement, Behavior Problem Severity and Type of Intervention. Behavior Therapy,15,204-209.

Wolf, M.M. (1978). Social Validity; The Case for Subjective Measurement How Behavior Analysis is finding its heart. Journalof Applied Behavior Analysis, 11, 203-214.

Wooldrige, P. & Richmanc, C.L. (1981). Teachers Choice of Punishment as a Function of a Student's Gender Age, Race and IQ Level. Journal of School of Psychology, 23, 19-29.

Wyatt v. Stickney, 344 F. Supp. 373, 344 F.Supp. 387 (M.D. Ala. 1972) aff'd sub nom. Wyatt v. Aderholt, 503 F.2d 1305 (5th Cir. 1974)

PUNISHMENT

EVALUATION OF DIFFERENT CLINICAL TREATMENTS

This package includes:

(a) A case description.
(b) Description of five treatment techniques.
(c) One set of questionaires to evaluate each treatment.

You are requested to:

1. Read the case description.
2. Read the description of the first treatment.
3. Complete the two questionaires with respect to the treatment you have just read.
4. Repeat this procedure for the second, third, fourth and fifth treatment techniques.

The aim of this questionaire is to find out your opinion on each of the treatment procedures by a series of questions about a specific example, When thinking about your responses to each of the treatments you must remember that it is an ideal example. Please assume the procedures will work as described.

PLEASE DO NOT LOOK AHEAD OR LOOK BACK TO PREVIOUS RESPONSES

WHEN COMPLETING THE QUESTIONAIRE.

GENERAL QUESTIONS

'lease place a tick in the box that is appropiate for you.

1. Sex: Male ☐ Female ☐

'. You are aged between:

☐	17 - 20 years	☐	35 - 40 years
☐	20 - 25 "	☐	40 - 45 "
☐	25 - 30 "	☐	45 - 50 "
☐	30 - 35 "	☐	50 or more

3. What is the highest qualification you have gained.

- ☐ Three years or less secondary education.
- ☐ School certificate.
- ☐ Sixth form certificate.
- ☐ U.E.
- ☐ Bursary.
- ☐ Scholarship.
- ☐ Trade or equivalent.
- ☐ Degree or Diploma.
- ☐ Other please specify _ _ _ _ _ _ _ _ _ _

. Do you have any children of your own ? _____ Yes _____ No

If yes how many _ _ _ _ _ _

Ages _ _ _ _ _ _

CASE DESCRIPTION

Sally is a ten year old girl of normal intelligence who is in a standard four class. At home Sally's behaviour toward her parents is non-compliant. For example Sally refuses to comply with their requests to come when called, stop watching television etc. Sally's interactions with her parents and siblings are characteristically both verbally and physcially aggressive. Sally's physcially aggressive behaviour generally involves pushing, hitting and biting her siblings when they have not provoked her. Sally's verbal aggression is calling people names and making threatening statements.
Sally's behaviour has been like this for six months. Her parents have been concerned that the discipline procedures that have been used such as scolding and sending her to bed early have been ineffective. Therefore professional help has been sought.

SOCIAL REPRIMANDS

A procedure that can be used to change John's disruptive behaviour problems is SOCIAL REPRIMANDS. This procedure is intended to control John's disruptive behaviour.
o the child. The person giving the reprimand should make eye contact and some form of physical contact (such as a hand on the shoulder) with the child, during the reprimand.The reprimand should begin with the child's name, and identify the behaviour for which they are being reprimanded. This punishment procedure is more effective when combined with praise for correct behaviour.
When John exhibits disruptive behaviour such as fighting with another child the teacher holds John by the shoulder looks at him and says firmly "John.Stop that ---------- (name the behavior) with --------(name the person) ". A reprimand will be given every time John's behaviour is disruptive.

RESPONSE - COST SYSTEM

rocedure that can be used with Sally's disruptive
aviour is RESPONSE-COST. It is designed to reduce
ruptive behaviour. A response-cost procedure involves a
son being given a certian number of tokens at the
inning of each day.These tokens (which are in this
mple paper tickets) can be attached to a notice board in
classroom. These tickets represent privileges or rewards
h as, free time in the classroom, pencils, trinkets etc.
h time an individual misbehaves then the teacher asks the
il to go and remove one of the tickets, tear it up and
ow it away. At the end of the day the remaining tickets
exchanged for rewards or privileges. If there are two or
e tickets then the reward is greater than if there is just
. If the disruptive behaviour occurs at a high rate then
er the last ticket has gone the pupil forfeits privileges
each disruptive behaviour that occurs.For example the
il may be required to pick up rubbish in the school
unds in their own time.
s procedure is discribed thoroughly to Sally, so that she
erstands the consequences of her misbehaviour. Both Sally
the teacher will decide the privileges and rewards that
l be exchanged for the tickets and those that will be
t.

OVERCORRECTON.

Overcorrection is a procedure that can be used to change Sally's disruptive behaviour. It is designed to eliminate disruptive behaviour and teach the individual to accept responsibility for their misbehaviours through the use of positive practice. Positive practice requires the individual to correct the situation they have caused and then to practice more appropriate behaviour a required number of times. Positive practice is assisted by both verbal instructions and manual (physcial) guidance. That is the individual must be verbally instructed on what to do, while the manual guidance ensures that the individual carries out the appropriate behaviour correctly and quickly. For overcorrection to be effective it is important for the procedure to begin immediately after the misbehaviour has occurred, and that positive practice should be completed quickly.

NON COMPLIANCE

This example is not the only example of non-compliant behaviour that Sally exhibits but it is the most typical.

Example. Sally is playing with her toys in the play room. When her parents ask her to put away her toys and get ready for bed she refuses.

The overcorrection procedure involves the parent saying to Sally. 'Sally.Stop playing with your toys and come and get ready for bed.' If Sally does'nt stand up and move towards her bedroom then the parent should go over to Sally and physcially assist her to stand up, and then guide her to her bedroom. When Sally gets to her bedroom she is to apologise for causing the delay and disruption and assure them that it will not happen again. Physcially guiding Sally to her bedroom during positive practice should be stopped when Sally responds in the appropriate way. This procedure should be carried out five times after each instance of disruptive behaviour.

PHYSICAL PUNISHMENT

ıysical punishment is a procedure that can be used to change ɔhn's physically aggressive behaviour. It is designed to liminate physically aggressive behaviour. The physical ınishment that will be given each time John's aggressive ehaviour occurs is a slap on the hand with a small wooden ɹler. The ruler should always be used to ensure the same ıtensity of the punishment. The punishment will be proceeded y a brief explanation which tells the child why the ınishment is being given. It is important when giving the ınishment that there is no-one else present. If there is ıen the punishment should be given in another private place, ɹch as outside the room.

ach time John exhibits the aggressive behaviour at home the arent tells John to go to his bedroom (or to some other ·ivate place if someone is in the bedroom). The parent says ɔ John " John, because you _ _ _ _ _ (the parent names the ehaviour), I am going to have to slap your hand.

TIME-OUT

A procedure that can be used to change Sally's disruptive behaviour is time-out from reinforcement. This procedure is designed to eliminate Sally's disruptive classroom behaviour. Time-out from reinforcement means there is a period of time in which a person is removed in some way from their normal environmemt. During that time away they cannot receive any rewards such as attention from teachers or other classmates. For Sally the time-out procedure consists of placing her in a part of the class room separate from the rest of the class by a partition. The partitioned part of the room is relatively bare. While in the time-out room Sally does not take part in any of the class activities nor can she see other members of the class.Sally has to sit in the time-out room for two minuites.If Sally's disruptive behaviour has not stopped after two mintues then she is to remain sitting in the time-out room until the behaviour has ceased. The time spent in the time-out room at any one time should not be any longer than ten minutes. After Sally's time is up she is allowed to resume normal class activitives. As soon as the disruptive behaviour occurs again she is immediately placed into the partitioned time-out part of the room.

Treatment Evaluation Inventory

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

not at all acceptable			moderately acceptable			very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

not at all willing			moderately willing			very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

not at all suitable			moderately suitable			very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them <u>this</u> treatment?

very bad			moderately			not bad at all

5. How cruel or unfair do you find this treatment?

very cruel			moderately cruel			not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

not at all acceptable to apply this procedure			moderately acceptable			very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

very different or inconsistent			moderately consistent			very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

does not treat humanely at all			treats them moderately humanely			treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

lot of risks are likely			some risks are likely			no risks are likely

10. How much do you like the procedures used in this treatment?

do not like them at all			moderately like them			like them very much

11. How effective is this treatment likely to be?

not at all effective			moderately effective			very effective

12. How likely is this treatment to make permanent improvements in the child?

unlikely			moderately			very likely

13. To what extent are undesirable side effects likely to result from this treatment?

many undesirable side effects likely			some undesirable side effects likely			no undesirable side effects would occur

. How much discomfort is the child likely to epxerience during the course of treatment?

very much discomfort			moderate discomfort			no discomfort at all

i. Overall, what is your general reaction to this form of treatment?

very negative			ambivalent			very positive

Treatment Evaluation Inventory

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

V=2.333

3	5	13	68	20	37	55
not at all acceptable			moderately acceptable			very acceptable

V=2.407

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

V=2.699

7	4	11	43	29	31	76
not at all willing			moderately willing			very willing

V=2.349

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

V=2.839

13	12	20	75	26	19	35
not at all suitable			moderately suitable			very suitable

V=2.955

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

V=3.611

7	0	6	41	23	31	92
very bad			moderately			not bad at all

V=2.782

5. How cruel or unfair do you find this treatment?

V=2.443

2	1	0	10	21	42	125
very cruel			moderately cruel			not cruel at all

V=2.187

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

V=2.187

V=1.138

18	5	10	39	21	39	69
not at all acceptable to apply this procedure			moderately acceptable			very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

V=1.857

4	4	8	61	19	36	69
very different or inconsistent			moderately consistent			very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

V=2.349

1	5	4	24	13	29	125
does not treat humanely at all			treats them moderately humanely			treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

V=2.955

3	4	11	49	23	37	74
lot of risks are likely			some risks are likely			no risks are likely

10. How much do you like the procedures used in this treatment?

V=2.782

10	8	14	51	31	32	55
do not like them at all			moderately like them			like them very much

11. How effective is this treatment likely to be?

V=2.187

13	21	23	68	29	22	25
not at all effective			moderately effective			very effective

12. How likely is this treatment to make permanent improvements in the child?

V=2.187

17	25	18	62	33	13	32
unlikely			moderately			very likely

13. To what extent are undesirable side effects likely to result from this treatment?

V=2.187

3	1	17	47	33	37	61
many undesirable side effects likely			some undesirable side effects likely			no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

V=2.294 6 — 3 — 7 — 51 — 32 — 44 — 58

very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

=3.220 14 — 5 — 12 — 53 — 22 — 35 — 59

very negative — ambivalent — very positive

Cumulative and adjusted Frequencies for Social Reprimands.

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

1·5/1·5 2·5/4·0 6·5/10·4 33·8/44·3 10·0/54·2 18·4/72·6 27·4/100

not at all acceptable — moderately acceptable — very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

3·5/3·5 2/5·5 5·5/10·9 21·4/32·3 14·4/46·8 15·4/62·2 37·8/100·0

not at all willing — moderately willing — very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

6·5/6·5 6·0/12·5 10·0/22·5 37·5/60 13/73 9·5/82·5 17·5/100

not at all suitable — moderately suitable — very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

3·5/3·5 3·0/6·5 0 20·5/27 11·5/38·5 15·5/54 46/100

very bad — moderately — not bad at all

5. How cruel or unfair do you find this treatment?

1/1 5/1·5 0 5/6·5 10·4/16·9 20·9/37·8 62·2/100

very cruel — moderately cruel — not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

9/9 2·5/11·4 5/16·4 19·4/35·8 10·4/46·3 19·4/65·7 34·3/100

not at all acceptable to apply this procedure — moderately acceptable — very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

2/2 2/4 4/8 30·3/38·3 9·5/47·8 17·9/65·7 34·3/100

very different or inconsistent — moderately consistent — very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

0·5/0·5 2·5/3 2/5 11·9/16·9 6·5/23·4 14·4/37·8 62·2/100

does not treat humanely at all — treats them moderately humanely — treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

1·5/1·5 2/3·5 5·5/9 24·4/33·3 11·4/44·8 18·4/63·2 36·8/100

lot of risks are likely — some risks are likely — no risks are likely

10. How much do you like the procedures used in this treatment?

5/5 4/9 7/15·9 25·4/41·3 15·4/56·7 15·9/72·6 27·4/100

do not like them at all — moderately like them — like them very much

11. How effective is this treatment likely to be?

6·5/6·5 10·4/16·9 11·4/28·4 33·8/62·2 14·4/76·6 10·9/87·6 12·4/100

not at all effective — moderately effective — very effective

12. How likely is this treatment to make permanent improvements in the child?

8·5/8·5 12·5/21 9/30 31/61 16·5/77·5 6·5/84 16/100

unlikely — moderately — very likely

13. To what extent are undesirable side effects likely to result from this treatment?

1·5/1·5 ·5/2 8·5/10·6 23·6/34·2 16·6/50·8 18·6/69·3 30·7/100

many undesirable side effects likely — some undesirable side effects likely — no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

3/3 1·5/4·5 35/8 25·4/33·3 15·9/49·3 21·9/71·1 28·9/100

very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

7/7 2·5/9·5 6/15·5 26·5/42 11/53 17·5/70·5 29·5/100

very negative — ambivalent — very positive

Treatment Evaluation Inventory — for Physical Punishment

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

V=3.811

38	42	14	55	17	9	26
not at all acceptable			moderately acceptable			very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

V=4.458

57	35	16	42	11	11	29
not at all willing			moderately willing			very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

V=2.730

64	24	23	62	15	7	5
not at all suitable			moderately suitable			very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

V=4.724

56	23	27	35	14	10	35
very bad			moderately			not bad at all

5. How cruel or unfair do you find this treatment?

V=4.124

24	24	19	44	24	21	45
very cruel			moderately cruel			not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

V=2.851

87	37	12	43	10	5	7
not at all acceptable to apply this procedure			moderately acceptable			very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

V=4.638

28	21	16	67	15	25	29
very different or inconsistent			moderately consistent			very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

V=3.330

40	31	22	57	22	13	16
does not treat humanely at all			treats them moderately humanely			treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

V=3.301

38	31	21	66	16	10	19
lot of risks are likely			some risks are likely			no risks are likely

10. How much do you like the procedures used in this treatment?

V=3.690

62	30	21	14	17	10	16
do not like them at all			moderately like them			like them very much

11. How effective is this treatment likely to be?

V=3.354

37	27	14	70	18	18	17
not at all effective			moderately effective			very effective

12. How likely is this treatment to make permanent improvements in the child?

V=3.719

51	32	17	56	14	10	20
unlikely			moderately			very likely

13. To what extent are undesirable side effects likely to result from this treatment?

V=3.182

37	26	20	69	14	21	13
many undesirable side effects likely			some undesirable side effects likely			no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

V=2.230

35	24	36	77	16	7	6
very much discomfort			moderate discomfort			no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

V=4.560

54	28	24	34	16	15	30
very negative			ambivalent			very positive

Cumulative and adjusted-Frequency for Physical Punishment.

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

18·9/18·9 | 20·9/39·8 | 7/46·8 | 27·4/74·1 | 8·5/82·6 | 4·5/87·1 | 12·9/100

not at all acceptable — moderately acceptable — very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

28·4/28·4 | 17·4/45·8 | 8/53·7 | 20·9/74·6 | 5·5/80·1 | 5·5/85·6 | 14·4/100

not at all willing — moderately willing — very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

32/32 | 12/44 | 11·5/55·5 | 31/86·5 | 7·5/94 | 3·5/97·5 | 2·5/100

not at all suitable — moderately suitable — very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

28/28 | 11·5/39·5 | 13·5/53 | 17·5/70·5 | 7/77·5 | 5/82·5 | 17·5/100

very bad — moderately — not bad at all

5. How cruel or unfair do you find this treatment?

11·9/11·9 | 11·9/23·9 | 9·5/33·3 | 21·9/55·2 | 11·9/67·2 | 10·4/77·6 | 22·4/100

very cruel — moderately cruel — not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

43·3/43·3 | 18·4/61·7 | 6/67·7 | 21·4/89·1 | 5/94 | 2·5/96·5 | 3·5/100

not at all acceptable to apply this procedure — moderately acceptable — very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

13·9/13·9 | 10·4/24·4 | 8/32·3 | 33·3/65·7 | 7·5/73·1 | 12·4/85·6 | 14·4/100

very different or inconsistent — moderately consistent — very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

19·9/19·9 | 15·4/35·3 | 10·9/46·3 | 28·4/74·6 | 10·9/85·6 | 6·5/92 | 8/100

does not treat humanely at all — treats them moderately humanely — treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

18·9/18·9 | 15·4/34·3 | 10·4/44·8 | 32·8/77·6 | 8/85·6 | 5/90·5 | 9·5/100

lot of risks are likely — some risks are likely — no risks are likely

10. How much do you like the procedures used in this treatment?

30·8/30·8 | 14·9/45·8 | 10·4/56·2 | 21·9/78·1 | 9/87·1 | 5/92 | 8/100

do not like them at all — moderately like them — like them very much

11. How effective is this treatment likely to be?

18·4/18·4 | 13·4/31·8 | 7/38·8 | 34·8/73·6 | 9/82·6 | 9/91·5 | 8·5/100

not at all effective — moderately effective — very effective

12. How likely is this treatment to make permanent improvements in the child?

25·5/25·5 | 16/41·5 | 8·5/50 | 28/78 | 7/85 | 5/90 | 10/100

unlikely — moderately — very likely

13. To what extent are undesirable side effects likely to result from this treatment?

18·5/18·5 | 13/31·5 | 10/41·5 | 34·5/76 | 7/83 | 10·5/93·5 | 6·5/100

many undesirable side effects likely — some undesirable side effects likely — no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

17·4/17·4 11·9/29·4 17·9/47·3 38·3/85·6 8/93·5 3·5/97 3/100

very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

26·9/26·9 13·9/40·8 11·9/52·7 16·9/69·7 8/77·6 7·5/85·1 14·9/100

very negative — ambivalent — very positive

Absolute Frequencies For Overcorrection.

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

V=3.212

24	27	17	72	22	14	25
not at all acceptable			moderately acceptable			very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

V=3.927

38	30	12	59	18	11	33
not at all willing			moderately willing			very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

V=2.708

31	25	34	68	19	7	14
not at all suitable			moderately suitable			very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

V=3.619

16	15	23	51	20	26	48
very bad			moderately			not bad at all

5. How cruel or unfair do you find this treatment?

V=3.478

13	6	15	44	25	19	79
very cruel			moderately cruel			not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

V=3.608

45	23	21	57	20	16	18
not at all acceptable to apply this procedure			moderately acceptable			very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

V=2.889

19	13	25	81	23	10	30
very different or inconsistent			moderately consistent			very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

V=3.099

13	16	21	69	20	24	38
does not treat humanely at all			treats them moderately humanely			treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

V=3.193

15	15	20	77	14	19	40
lot of risks are likely			some risks are likely			no risks are likely

10. How much do you like the procedures used in this treatment?

V=3.295

36	23	30	66	15	19	22
do not like them at all			moderately like them			like them very much

11. How effective is this treatment likely to be?

V=2.798

20	28	23	77	20	12	20
not at all effective			moderately effective			very effective

12. How likely is this treatment to make permanent improvements in the child?

V=3.205

34	23	27	67	18	19	16
unlikely			moderately			very likely

13. To what extent are undesirable side effects likely to result from this treatment?

V=2.960

11	23	25	64	32	10	35
many undesirable side effects likely			some undesirable side effects likely			no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

V=3.477

25	16	23	63	23	19	32
very much discomfort			moderate discomfort			no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

V=3.613

28	20	28	59	22	11	33
very negative			ambivalent			very positive

Treatment Evaluation Inventory — Cumulative and adjusted Frequencies for Overcorrection

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

11·9/11·9 — 13·4/25·4 — 8·5/33·8 — 35·8/69·7 — 10·9/80·6 — 7/87·6 — 12·4/100

not at all acceptable — moderately acceptable — very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

14·9/14·9 — 18·9/33·8 — 6/39·8 — 29·4/69·2 — 9·0/78·1 — 5·5/83·6 — 16·4/100

not at all willing — moderately willing — very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

15·7/15·7 — 12·6/28·3 — 17·2/45·5 — 34·3/79·8 — 9·6/89·4 — 3·5/92·9 — 7·1/100

not at all suitable — moderately suitable — very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

8/8 — 7·5/15·6 — 11·6/27·1 — 25·6/52·8 — 10·1/62·8 — 13·1/75·9 — 24·1/100

very bad — moderately — not bad at all

5. How cruel or unfair do you find this treatment?

6·5/6·5 — 3/9·5 — 7·5/16·9 — 21·9/38·8 — 12·4/51·2 — 9·5/60·7 — 39·3/100

very cruel — moderately cruel — not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

22·5/22·5 — 11·5/34 — 10·5/44·5 — 28·5/73 — 10/83 — 8/91 — 9/100

not at all acceptable to apply this procedure — moderately acceptable — very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

9·5/9·5 — 6·5/15·9 — 12·4/28·4 — 40·3/68·7 — 11·4/80·1 — 5/85·1 — 14·9/100

very different or inconsistent — moderately consistent — very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

6·5/6·5 — 8/14·4 — 10·4/24·9 — 34·3/59·2 — 10/69·2 — 11·9/81·1 — 18·9/100

does not treat humanely at all — treats them moderately humanely — treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

7·5/7·5 — 7·5/15 — 10/25 — 38·5/63·5 — 7/70·5 — 9·5/80 — 20/100

lot of risks are likely — some risks are likely — no risks are likely

10. How much do you like the procedures used in this treatment?

17·9/17·9 — 11·4/29·4 — 14·9/44·3 — 32·8/77·1 — 7·5/84·6 — 4·5/89·1 — 10·9/100

do not like them at all — moderately like them — like them very much

11. How effective is this treatment likely to be?

10/10 — 14/24 — 11·5/35·5 — 38·5/74 — 10/84 — 6/90 — 10/100

not at all effective — moderately effective — very effective

12. How likely is this treatment to make permanent improvements in the child?

17/17 — 11·5/28·5 — 13·5/42 — 31·5/73·5 — 9/82·5 — 9·5/92 — 8/100

unlikely — moderately — very likely

13. To what extent are undesirable side effects likely to result from this treatment?

5·5/5·5 — 11·5/17 — 12·5/29·5 — 32/61·5 — 16/77·5 — 5/82·5 — 17·5/100

many undesirable side effects likely — some undesirable side effects likely — no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

12·4/12·4 — 8/20·4 — 11·4/31·8 — 31·3/63·2 — 11·4/74·6 — 9·5/84·1 — 15·9/100

very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

13·9/13·9 — 10/23·9 — 13·9/37·8 — 29·4/67·2 — 10·9/78·1 — 5·5/83·6 — 16·4/100

very negative — ambivalent — very positive

 Absolute Frequencies for Time out.

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

V=3.698

17	15	6	54	20	32	57
not at all acceptable			moderately acceptable			very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

V=4.488

29	11	7	43	15	36	60
not at all willing			moderately willing			very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

V=3.951

32	17	20	59	14	24	32
not at all suitable			moderately suitable			very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

V=4.314

24	13	20	44	15	25	60
very bad			moderately			not bad at all

5. How cruel or unfair do you find this treatment?

V=3.014

7	9	11	33	20	35	85
very cruel			moderately cruel			not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

V=4.592

52	23	8	51	17	16	31
not at all acceptable to apply this procedure			moderately acceptable			very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

V=2.838

11	15	9	75	21	35	35
very different or inconsistent			moderately consistent			very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

V=3.148

7	16	15	50	26	28	59
does not treat humanely at all			treats them moderately humanely			treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

V=2.768

11	4	8	74	27	31	35
lot of risks are likely			some risks are likely			no risks are likely

10. How much do you like the procedures used in this treatment?

V=3.996

27	14	11	58	21	25	45
do not like them at all			moderately like them			like them very much

11. How effective is this treatment likely to be?

V=2.995

18	8	16	67	32	26	33
not at all effective			moderately effective			very effective

12. How likely is this treatment to make permanent improvements in the child?

V=3.353

23	15	13	65	29	24	31
unlikely			moderately			very likely

13. To what extent are undesirable side effects likely to result from this treatment?

V=2.879

14	11	16	61	33	33	32
many undesirable side effects likely			some undesirable side effects likely			no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

V=2.601 14 10 9 85 27 28 28
very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

V=4.265 25 16 15 43 19 30 53
very negative — ambivalent — very positive

Treatment Evaluation Inventory Cumulative and Adjusted Frequencies for Twin Out.

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

8·5/8·5 7·5/15·9 3/18·9 26·9/45·8 10/55·7 15·9/71·6 28·4/100
not at all acceptable — moderately acceptable — very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

14·4/14·4 5·5/19·9 3·5/23·4 21·4/44·8 7·5/52·2 17·9/70·1 29·9/100
not at all willing — moderately willing — very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

16·1/16·1 8·5/24·6 10·1/34·7 29·6/64·3 7/71·4 12·4/83·4 16·6/100
not at all suitable — moderately suitable — very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

11·9/11·9 6·5/18·4 10/28·4 21·9/50·2 7·5/57·7 12·4/70·1 29·9/100
very bad — moderately — not bad at all

5. How cruel or unfair do you find this treatment?

3·5/3·5 4·5/8 5·5/13·5 16·5/30 10/40 17·5/57·5 42·5/100
very cruel — moderately cruel — not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

26·3/26·3 11·6/37·9 4/41·9 25·8/67·7 8·6/76·3 8·1/84·3 15·7/100
not at all acceptable to apply this procedure — moderately acceptable — very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

5·5/5·5 7·5/12·9 4·5/17·4 37·3/54·7 10·4/65·2 17·4/82·6 17·4/100
very different or inconsistent — moderately consistent — very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

3·5/3·5 8/11·4 7·5/18·9 24·9/43·8 12·9/56·7 13·9/70·6 29·4/100
does not treat humanely at all — treats them moderately humanely — treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

5·5/5·5 7/12·5 4/16·5 37/53·5 13·5/67 15·5/82·5 17·5/100
lot of risks are likely — some risks are likely — no risks are likely

10. How much do you like the procedures used in this treatment?

13·4/13·4 7/20·4 5·5/25·9 28·9/54·7 10·4/65·2 12·4/77·6 22·4/100
do not like them at all — moderately like them — like them very much

11. How effective is this treatment likely to be?

9/9 4/13 8/21 33·5/54·5 16/70·5 13/83·5 16·5/100
not at all effective — moderately effective — very effective

12. How likely is this treatment to make permanent improvements in the child?

11·5/11·5 7·5/19 65/25·5 32·5/58 14·5/72·5 12/84·5 15·5/100
unlikely — moderately — very likely

13. To what extent are undesirable side effects likely to result from this treatment?

7/7 5·5/12·5 8·0/20·5 30·5/51 16·5/67·5 16·5/84 16/100
many undesirable side effects likely — some undesirable side effects likely — no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

7/7 5/11.9 4.5/16.4 42.3/58.7 13.4/72.1 13.9/86.1 13.9/100

very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

12.4/12.4 8/20.4 7.5/27.9 21.4/49.3 9.5/58.7 14.9/73.6 26.4/100

very negative — ambivalent — very positive

Absolute Frequencies for Response Cost.

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

V=2.935

13	2	6	49	29	36	66
not at all acceptable			moderately acceptable.			very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

V=3.095

13	4	7	39	26	39	73
not at all willing			moderately willing			very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

V=2.845

13	9	9	61	33	36	38
not at all suitable			moderately suitable			very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

V=4.301

20	13	11	34	14	30	79
very bad			moderately			not bad at all

5. How cruel or unfair do you find this treatment?

V=1.182

2	1	2	9	14	32	140
very cruel			moderately cruel			not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

V=4.352

29	13	10	56	11	29	52
not at all acceptable to apply this procedure			moderately acceptable			very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

V=2.565

6	9	16	56	35	33	46
very different or inconsistent			moderately consistent			very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

V=1.840

2	3	5	23	16	33	119
does not treat humanely at all			treats them moderately humanely			treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

V=2.492

5	5	8	65	21	34	63
lot of risks are likely			some risks are likely			no risks are likely

10. How much do you like the procedures used in this treatment?

V=3.170

14	7	5	63	22	32	58
do not like them at all			moderately like them			like them very much

11. How effective is this treatment likely to be?

V=2.373

7	5	10	58	36	40	45
not at all effective			moderately effective			very effective

12. How likely is this treatment to make permanent improvements in the child?

V=3.274

17	8	8	47	36	35	49
unlikely			moderately			very likely

13. To what extent are undesirable side effects likely to result from this treatment?

V=2.206

6	4	7	64	35	40	44
many undesirable side effects likely			some undesirable side effects likely			no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

V=2.396 6 5 3 54 20 50 62

very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

V=3.066 12 7 6 36 29 42 69

very negative — ambivalent — very positive

Cumulative And Adjusted Frequencies for Response Cost.

Treatment Evaluation Inventory

Please complete the items listed below. The items should be completed by placing a checkmark on the line under the question that best indicates how you feel about the treatment. Please read the items very carefully because a checkmark accidentally placed on one space rather than another may not represent the meaning you intended.

1. How acceptable do you find this treatment to be for the child's problem behavior?

6·5/6·5 — not at all acceptable; 1/7·5; 3/10·4; 24·4/34·8 — moderately acceptable; 14·4/49·3; 17·9/67·2; 32·8/100 — very acceptable

2. How willing would you be to carry out this procedure yourself if you had to change the child's problems?

6·5/6·5 — not at all willing; 2/8·5; 3·5/11·9; 19·4/31·3 — moderately willing; 12·9/44·3; 19·4/63·7; 36·3/100 — very willing

3. How suitable is this procedure for children who might have other behavioral problems than those described for this child?

6·5/6·5 — not at all suitable; 4·5/11·1; 4·5/15·6; 30·7/46·2 — moderately suitable; 16·6/62·8; 18·1/80·9; 19·1/100 — very suitable

4. If children had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

10/10 — very bad; 6·5/16·4; 5·5/21·9; 16·9/38·8 — moderately; 7/45·8; 14·9/60·7; 39·3/100 — not bad at all

5. How cruel or unfair do you find this treatment?

1/1 — very cruel; ·5/1·5; 1/2·5; 4·5/7 — moderately cruel; 7/14; 16/30; 70/100 — not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized children, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

14·5/14·5 — not at all acceptable to apply this procedure; 6·5/21; 5/26; 28/54 — moderately acceptable; 5·5/59·5; 14·5/74; 26/100 — very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

3/3 — very different or inconsistent; 4·5/7·5; 8/15·4; 27·9/43·3 — moderately consistent; 17·4/60·7; 16·4/77·1; 22·9/100 — very consistent with everyday notions

8. To what extent does this procedure treat the child humanely?

1/1 — does not treat humanely at all; 1·5/2·5; 2·5/5; 11·4/16·4 — treats them moderately humanely; 8/24·4; 16·4/40·8; 59·2/100 — treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

2·5/2·5 — lot of risks are likely; 2·5/5; 4/9; 32·3/41·3 — some risks are likely; 10·4/51·7; 16·9/68·7; 31·3/100 — no risks are likely

10. How much do you like the procedures used in this treatment?

7/7 — do not like them at all; 3·5/10·4; 2·5/12·9; 31·3/44·3 — moderately like them; 10·9/55·2; 15·9/71·1; 28·9/100 — like them very much

11. How effective is this treatment likely to be?

3·5/3·5 — not at all effective; 2·5/6; 5/10·9; 28·9/39·8 — moderately effective; 17·9/57·7; 19·9/77·6; 22·4/100 — very effective

12. How likely is this treatment to make permanent improvements in the child?

8·5/8·5 — unlikely; 4/12·5; 4/16·5; 23·5/40·0 — moderately; 18/58; 17·5/75·5; 24·5/100 — very likely

13. To what extent are undesirable side effects likely to result from this treatment?

3/3 — many undesirable side effects likely; 2/5; 3·5/8·5; 32/40·5 — some undesirable side effects likely; 17·5/58; 20/78; 22/100 — no undesirable side effects would occur

14. How much discomfort is the child likely to epxerience during the course of treatment?

3/3 2·5/5·5 1·5/7 27/34 10/44 25/69 31/100

very much discomfort — moderate discomfort — no discomfort at all

15. Overall, what is your general reaction to this form of treatment?

6/6 3·5/9·5 3/12·4 17·9/30·3 14·4/44·8 20·9/65·7 34·3/100

very negative — ambivalent — very positive